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WHY FARMERS ARE POOR



Why Farmers Are Poor

THE AGRICULTURAL CRISIS IN THE UNITED STATES

by Anna Rochester

AUTHOR OF RULERS OF AMERICA



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A. R.

April, 1940.

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CHAPTER I

Poverty Haunts the Countryside

STARVING sharecroppers and refugees from the Dust Bowl have been flashed on the newsreels and pictured in the tabloids. Homeless poor farmers in Oklahoma, trekking desperately to a worse poverty in California, have been immortalised by John Steinbeck in *Grapes of Wrath*. But publicity and literary immortality do not feed the hungry. The farm problem is both deeper and broader than anything that newsreels and novels can convey.

Farm poverty is by no means confined to the so-called "submarginal" or "disadvantaged" areas. Driving through almost any part of the American countryside a casual observer sees the unpainted, brokendown buildings of farmers who cannot make ends meet. Even comfortable homes, with rich broad acres of grain or cotton, orchards, large truck gardens, herds of well-fed cattle, have forlorn neighbours not far away, with poor crops, stringy cattle, and all the obvious signs of a hard existence. And many of the farmers in the comfortable houses are wondering how long they can keep going. For "recovery" from the severe crisis of 1929-33 has not restored to the farmers the gross income or the purchasing power which they had in the 1920's. And for the farmers, even the 1920's were no golden era. Farmers were faring much less well than they had fared before the World War.

When prices slid rapidly downward from 1929 to the spring of 1933, farmers' gross income was cut by more than 55%. After seven years of "recovery," most of the more than 6,500,000 farmers were either living in extreme poverty with a very small scale of operation and obvious hardships or were carrying on a medium-sized farm with a heavy burden of debt. Behind the cheerful air of the "middle" farmer's house and barns and fruitful fields, there often lurks a haunting anxiety and a greatly reduced standard of personal comfort.

Uncounted thousands have been driven off the land. Tractors are obliterating the boundaries of little sharecropper plots in some of the older cotton regions, tossing these families from the poverty of extreme exploitation into the worse destitution of complete unemployment. Everywhere "recovery" has shown the unjust caprices of our capitalist system, widening the gap between those who have the resources for a fresh start and the many who are pushed nearer to destitution. At the same time, thousands discouraged by the continuing mass unemployment in the cities go out vainly hoping for subsistence on the land and swelling the ranks of the rural poor. Numbers on the land have actually increased since 1930.

Farm problems affect directly almost one-fourth of all persons in the United States, for some 32,000,000 men, women and children live or work on farms. Another 24,000,000 who are neither members of farm families nor farm wage workers live in villages and open country, and very many of these are directly and obviously dependent upon the farmers' prosperity.

The question of well-being or misery on farms is also a matter of great importance to all other Americans. Low farm purchasing power cuts into the home market for industrial products and helps to increase unemployment among industrial workers.

In "prosperous" 1929 there were already over 1,800,000 farms—more than one-fourth of all the farms in the country—yielding gross farm income of less than \$600. This was a gross total before deduction of any costs of operation. And it was larger than the cash total derived from the farm, since it included products used by the farm family along with those sold or traded. On these farms lived over 7,700,000 men, women and children whose lives, in the chilly words of a government report, "were disadvantaged because of the lack of purchasing power." ¹ Some 3,000,000 farms, or nearly half of all in this land of "boundless opportunity" were small concerns producing less than \$1,000 of gross income.

When a farmer's yearly receipts are too low even for current expenses, he cannot save toward the proverbial rainy day-or for the more menacing dry days of continued drought. During the economic crisis which began in 1929, widespread drought and a sharp decline in farm prices combined to bring catastrophe to the farmers. Men in vigorous middle age who had farmed all their lives, and young men well equipped and well schooled, had to seek aid, along with those who had struggled on the edge of destitution. Numbers of rural households on relief mounted more sharply than the number of city households. About three and a half million rural households, more than one out of four of the families on farms and in villages, received assistance from a public or private agency at some time during the years from 1930 to 1937. And this is called a conservative estimate.²

Their plight has been described in a dozen or more reports by the Works Progress Administration's division of social research. Yet these valuable studies exposing the extreme poverty that has come upon rural families of all types and ages admittedly understate the true seriousness of the situation. For farm families, as the reports indicate, will struggle along half-starved and penniless, long after a city family would ask for aid. Social agencies have been far less developed in the country than in the cities. When relief was given, it averaged a little more than 50 cents a day per family in the North and less than 30 cents a day per family in many counties of the South.³

None of these figures includes farmers receiving only the special loans and benefits "which operated both to help keep farm families off relief and to reduce the needs of those who were forced to apply for public assistance." ⁴ Uncounted thousands more have been in need of public aid but have received none—in any form.

Extreme farm poverty was present before the crisis years. And "recovery" did not bring prosperity. On the poorest farms the farmer himself or one of his family is usually trying to earn something from other employment. Taking account of all net income from any source except relief, "Farm families are conspicuously massed in the lower income levels—52% falling below \$1,000," according to an estimate for 1935-36 by the National Resources Committee.⁵ When farm families on relief (as estimated in the same report) are included with others having less than \$1,000 consumer income, we have the following distribution of farm families in 1935-36: ⁶ 3,825,800 farm families, or 56% of all, had less than \$1,000. 1,393,600 farm families, or 21% of all, had from \$1,000 to \$1,500. 1,073,000 farm families, or 16% of all, had from \$1,500 to \$2,500. 474,800 farm families, or 7% of all, had over \$2,500. Less than 25,000, or about 4 farms in every 1,000, had \$10,000 or over.

More farmers are poor in the South than elsewhere. And Negro farmers, most of whom are in the South, are the poorest of all. In a study of sharecropper families, not on relief, in selected counties of four southern states (Georgia, Mississippi, North Carolina, and South Carolina), Negro sharecropper families averaged \$294 a year in cash income, while white sharecropper families averaged \$350.⁷ In releasing these figures the U. S. Bureau of Home Economics cautioned that the areas studied "often were not typical of the state as a whole, frequently being better than the average."

If one-third of the nation is "ill-housed, ill-clad, ill-nourished," as President Roosevelt stated in 1937, then certainly more than a third of the farm population must be so described. "Rural slums" are vividly pictured in many government reports. Only 9% of the farm houses in the nation as a whole had indoor toilets in 1934; about 18% had electricity; less than 4 out of 10 had water pumped or piped into the dwelling and only 1 in 13 had provision for hot and cold running water. New England farm houses were far above the average in condition, in facilities and convenience, while southern farm houses were far below the general average for the country as a whole.⁸ Some sharecroppers live in houses without glass windows.

"Ill-nourished"-and illness is the result. The President's Committee on Farm Tenancy has this to say:

"Many of these families are chronically undernourished. They are readily subject to diseases. Pellagra, malaria, and the hookworm and other parasites exact heavy tolls in life and energy. Suitable provision for maintaining health and treating disease among these families is lacking or inadequate in many localities." ⁹

Where the needs are greatest, facilities for medical care are fewest. A national health survey revealed that about 17,000,000 people, mostly of the rural population, live in 1,338 counties that have no registered general hospital. "Remoteness from metropolitan centres, a very small

percentage of urban population, and low tax income" characterise these counties.¹⁰ Not even a public-health nurse is employed to serve rural areas in about 1,000 counties of this nation.

Nearly a quarter of a million women in 1936 did not have the advantage of a physician's care at the time of confinement. More than one baby in ten was born without benefit of doctors. Most of these were in rural areas. Child health centres in cities and towns have reduced illness and mortality among children: "Yet roughly two-thirds of our rural areas are without such services." ¹¹

Disadvantaged not only in physical matters of health and housing but also in educational facilities and opportunities, countless thousands of farm youth must grow up without adequate schooling or the chance to attend high school and college. Rural illiteracy is more than twice as great as urban. In 1930 there were 810,000 children between the ages of 7 and 13 who were not going to school at all. Most of these children were in the poorest rural areas.¹²

"In 1930 the farm population was responsible for the care and education of 31% of the children, but the farmers received only 9% of the national income. In the Southeastern region this disparity was still greater, the farmers of that region having the care of approximately 4,250,000 children age 5 to 17, with only 2% of the national income. At the other extreme the nonfarm population of the Northeast, with approximately 8,500,000 children age 5 to 17, had 42% of the national income." ¹³

And what of the future for these under-privileged youth? Mass unemployment in the cities has closed the industrial opportunities formerly open for those who cannot make a living on the farms or in the villages where they were born. There results what government surveys have called the "accumulation on farms of farmers' sons lacking other opportunities," and this "accumulation" tends to be more rapid in the poorest farming areas.¹⁴

No one who has read John Steinbeck's *Grapes of Wrath* can forget his portraits of the younger Joads—their strength, their ambitions, and their thwarted dreams. Multiply the Joad family by several million and we have some idea of American rural youth and their problems. For it is not only the migrants, driven off their farms, who are in a desperate situation. Almost as serious is the plight of youth on the more than four million poor small farms and in the villages deadened by the rural poverty.

Government agencies have "recorded with dismay" the problems of American agriculture and the urgency of a solution. Farm organisations are increasingly active. The American Federation of Labour and the Congress of Industrial Organisations have gone on record for greater unity between labour and poor farmers. Wage workers and working farmers are beginning to see that they have some common interests which must be defended against the policies of finance capital.

Almost everybody agrees that something must be done. Many of the separate factors in farm poverty are commonly recognised: poor soils, small farms, lack of technical equipment and technical knowledge; separation of farmers from farm ownership and an increasing burden of debt; decline in export markets; pressure from monopoly processors and distributors. But it is not so easy to see just how these and other factors in the farm problem have arisen and how they are inter-related with one another.

Neither farmers nor workers nor government experts will solve the problem of farm poverty until we have a better understanding of the relations between farming and the non-farm sections of our economy. It is not enough to recognise that total cash income of farmers and total factory payrolls tend to rise and fall together. It is not enough to say that the very small farmers who have so little part in commercial agriculture are fellow-sufferers with the masses of unemployed men and women in our towns and cities. For having stated these facts, the farm specialists still tend to approach farm poverty as a separate and distinct problem, and not as an integral part of the great current struggle between poverty and monopoly.

Farming is a business, dependent on markets; it is part of the capitalist world. Farmers as business men have been pinched between the monopoly traders and processors, who push down prices paid to farmers, and the great manufacturing corporations which maintain high prices for farm implements, building materials and fertiliser. Even prices paid by farmers for things they and their families need run consistently higher than prices farmers receive for their products. This conflict between the highly concentrated forces in industry and the more than 6,500,000 farmers has been one central fact in the farmer's situation.

Prices operating against the farmers increased the inherent difficulties faced by small producers who try to expand their scale of operation. Low prices for farm products intensified the pressure driving each farmer to try to reduce his costs. High prices for labour-saving farm machinery and equipment brought new costs for borrowing. Farmers had to use many different means of obtaining funds and credit. Mortgages were one important source of funds and mortgages increased the farmers' instability. Many dropped into tenancy and the debt on mortgaged farms grew heavier.

These trends moved disastrously against the farmers in the 1920's. Several factors combined to create a farm crisis even while financiers and small investors were blowing their bubbles of prosperity. Three were especially important.

Collapse of the World War boom in 1920-21 caught the wheat and livestock farmers with perilously heavy burdens of debt.

Tractors and farm machinery reached a new stage of development. Increased mechanisation greatly widened the spread between low production costs on large well-equipped farms and high production costs on small or backward farms. It pushed the smallest farmers into a position comparable with that of the cottage weavers, more than a hundred years ago, when they could not compete with power looms in the rapidly expanding textile mills.

Among processors and traders the "prosperity" of the 1920's stimulated fresh mergers and strengthened the monopoly forces with which the farmers had to deal. Packers, it is true, had been somewhat held in check by the Supreme Court. The tobacco "trust" had been broken up into three corporations instead of one. But these changes brought no relief to the livestock and tobacco farmers. More important was the fact that other monopolies were being expanded and strengthened: for milling and baking; for the handling of milk and milk products; and for trading in "futures" of cotton and wheat.

To understand the farm crisis of the 1930's, which has persisted in spite of some "recovery" after 1932-33, we must have clearly in mind the trends and the economic forces operating against the farmers before these years of economic crisis throughout the business world. Agriculture must be considered against its general background as part of the capitalist economy, for it is not subject to separate economic laws. As in industry, economic forces bring conflict between large farms and small farms and drive the smallest producers to the very edge of commercial production. Especially important in agriculture is the rôle of rent, and a correct analysis of its nature, along with the reasons why tenancy and mortgage debt have increased.

Differences in the way the crisis has affected the three chief groups in the farm population are also important. Certain basic problems of farm wage workers, very small farmers, and the medium-sized family farms had become acute in the 1920's. These should be understood before approaching the very urgent question of markets and prices for the chief farm commodities.

Farmers' problems are tied in with the problems of other classes exploited and impoverished by the present system. The long road toward a solution can be found by farmers only as they move in close co-operation with the working class.

CHAPTER II

Farming as Part of Capitalist Economy

BECAUSE its technical and economic development was retarded, agriculture has too often been looked upon as functioning outside the sphere of capitalist economy, a permanent survival of pre-capitalist society governed by different economic laws. Rejecting this conclusion, we must show why agriculture has lagged behind non-farm industry and how the underlying principles in these two great sections of our economic structure are essentially the same.

Modern industry developed from the application of mechanical power to machines which took the place of hand tools. This was accomplished first for processes carried on at any one spot. Mobile power came later, and mobile power well adapted to use in the fields came only in the 20th century with the perfected internal combustion engine and the modern tractor.

The use of power in factories followed a considerable period of "manufacture"—literally, making by hand—by groups of wage-earners assembled in workshops and operating with some division of labour. Already, the petty capitalists who employed them were drawing off surplus value produced by the workers and thereby accumulating wealth.¹ So from the beginning modern factory production was carried on under completely capitalist relationships.

Technical progress was eagerly pursued, since it increased the wage workers' productivity and the surplus value that could be taken from them by the owners of the most technically advanced establishments within each industry. From this relationship and the increasing complexity which developed with technical progress and the rapid accumulation of capital, there emerged the fabulous wealth, the concentration of power, the economic crises, and the mass unemployment with which we are familiar to-day.

Technically, agriculture was left behind, for the industrial revolution did not immediately affect the work of raising crops and livestock. But even in the earliest stages of capitalist development, some large land-owners were carrying on large-scale production, exploiting their workers under various forms from survivals of feudal serfdom to "free" wage labour. Long after the industrial revolution began, such large-scale agriculture continued on the basis of hand labour and old, almost primitive, methods of work.

In the American colonies southern plantation owners largely depended from the beginning on indentured servants (long-term contract labourers) picked up from among the destitute proletariat of the old countries. Later, Negro slaves were brought from Africa, and only after the Civil War (1861-65) did slavery give way to the semi-feudal sharecropping system. For the exploitation of those who labour did not begin with capitalism, and pre-capitalist forms of exploitation may survive in the midst of a world dominated by capitalism.

As feudalism yielded to capitalism in the older countries, the peasant family paying money rent instead of labour time to the landlord had become an important unit of commercial production in agriculture. In the American colonies, except in areas of rice, cotton and tobacco plantations, the farm family employing no wage labour and supporting itself without the sale of its labour power was the chief economic unit.

The farmer, even when not an employer, has always combined with his production for home use some production for the market. He is a petty business man, subject to general business conditions determined by the forces inherent in capitalist society. And these forces have made more and more difficult his position as a small individual producer. They have sharpened the class lines within agriculture, and conflicts of interest have developed between the individual producer, the small employer, and the large farms which are completely capitalist within themselves and depend wholly upon exploitation of wage labour.

In later chapters we take up the story of this capitalist development within agriculture. But first we must have clearly in mind the ways

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in which agriculture is a part of the capitalist economy. For in a very real sense the small commercial farmer who is not individually a capitalist is participating in capitalist agriculture. And the farmer who is a small employer has taken the first steps toward a completely capitalist form of operation.

Interdependence of Agriculture and Industry *

While agriculture and industry have been developing at a different pace, they have been continuously bound together and dependent each upon the other. Obviously, the great non-farm population could not live without the food produced on farms. Most of this food reaches the consumer only after it has passed through the hands of processors who use it as raw material in their accumulation of capital. Other industries depend on cotton, tobacco, corn and other farm products as basic materials. Crops and livestock direct from the farm have made up about 12% of the total freight tonnage carried by the railroads. At the same time, the farm population has provided a wide market within the United States for consumers' goods, building materials and farm equipment produced by American industry.

Exported agricultural products have played an important rôle in the capitalist development of the United States. The American Revolution gave the colonists freedom to build a new industrial country. Then, as conditions were stabilised and population increased, the urge for rapid industrial development outran the resources of the American capitalists. They turned to the older countries and borrowed from the wealth there accumulated through age-long exploitation of peasants and the earlier development of capitalist industry. Throughout the 19th century American farms produced more cotton, wheat and livestock than the American market could absorb, while the surplus crossed the ocean as one important means of payment for amounts due on foreign investments in the United States.

While this surplus product from American farms helped to make

^{*} In the broadest sense, agriculture is part of industry as a whole and also agriculture is an industry. But for brevity we shall use industry and industrial in their popular sense as excluding agriculture and referring to non-farm activities: mining, construction, manufacturing, transportation and communication.

possible the rapid growth of industry and banking in this country, it held the farmers bound by a thousand threads to the movements of the entire capitalist world. It made them subject as a class to the traders and bankers in this country. It made their prosperity depend not on weather and diligence but on the ups and downs of employment and production and markets and prices in Liverpool and Hamburg and Buenos Aires and Bombay.

In spite of this surplus product available for export, agriculture itself even in its most prosperous periods accumulated relatively little capital. Southern planters, exploiting slave labour, obtained wealth from the labour of their slaves. But much of it went in luxurious living. Part of it became capital in the hands of the merchant bankers who took toll from the planters for financing their exports of cotton and tobacco and their imports of luxury goods. The working farmer had no such source of accumulation. For so long as he operates a family farm with a minimum of wage labour the individual farmer can produce only a limited surplus. Until he expands his scale of operation and takes on large numbers of wage workers from whose labour he appropriates surplus value, the farmer does not achieve any large accumulation of capital.

While agriculture was expanding rapidly and new land was being settled, some farmers sold out and invested in industry the money they had received for their farms. This fact has given the impression that farmers contributed much capital to the early expansion of industry. Instead, such land transactions merely transfer from one man to another the claim on future current surplus from use of the land. Money paid to the departing farmer may or may not have been saved by the buyer from his work on some other farm. If the departing farmer invests it in industry, he may simply be restoring to industry capital which had been accumulated by the purchaser without any reference to agriculture.

Indirectly, however, the farmers have been compelled to assist in the accumulation of capital by non-farm capitalists. Part of their surplus has been drawn off as rent to absentee landlords and interest to mortgage-holders. Their own returns have been cut into by high railroad rates, high prices paid for building materials and implements, and low prices received from monopoly processors and traders. We return shortly to this question of monopoly pressure on farmers' income. And in Chapter V we take up the source and nature of rent and land "values."

Historically, when farmers tried to enlarge their scale of operations they would depend to a great extent on borrowed funds. These were drawn increasingly from the accumulations of non-farm capitalists. Farm mortgages have long been an important item in the capital investments of insurance companies, banks, and wealthy individuals. At the same time, farmers' possibilities of accumulating capital from their current operations were reduced by the toll they must pay to landlords and mortgage-holders. Any serious disturbance in the welfare of agriculture affects both the farmers and these outside financial interests. Payments of interest and principal are defaulted, checking this stream of value that passes yearly from the farms to the pockets of non-farm capitalists. Creditors close in and take possession through foreclosures. More and more farmers lose their hold on the land. But the new absentee landlords are confronted with declining land prices and a temporary loss of income from their newly acquired farms.

In the long run the city interests acquire an increasing share of the farmers' income. Finance capital gains at the expense of the farmer. But the readjustments through which this tighter stranglehold was perfected, during the long depression of agriculture, gave a sombre background to the industrial and financial boom-years of the 1920's. From 1923 to 1928, inclusive, about 4,000 small-town banks, most of them functioning in close relation to the farmers, were forced to suspend operations. ^{1°} And in the broader economic crisis after 1929 much of the federal emergency program of "farm" relief was designed to bolster the farmers' non-farm creditors.

Averages, of course, tell only part of the story. Contrasts have developed between well-to-do farmers on one hand, and very poor farmers and farm wage workers on the other. Still sharper contrasts have developed in the non-farm world where powerful financiers and the great corporations they control tower over the petty business men and the wage workers, and great masses are totally unemployed. But it is important to note that agriculture as a whole has accumulated far less capital than non-farm industry. Partly this has been due to its retarded economic development, but even more to the ways in which farmers have been directly exploited by these powerful financiers and their great corporations.

Taking the entire population in both great sections of society, the per capita wealth of farmers and farm workers is considerably less than two-thirds of the per capita wealth of the non-farm population.²

Relative Importance of Agriculture Declines

Non-farm industry has expanded far more rapidly than agriculture. While men have continued to move back and forth from farms to cities and cities to farms, the main current of population has flowed away from agriculture. "From one-fourth to one-half of the farm youth left the farms for the cities each decade between 1870 and 1930."³ During the ten years from 1920 to 1929, inclusive, about 1,300,000 men, women and children moved out each year from cities to farms while 1,940,000 were leaving farms for the city. This exodus from agriculture, averaging a net decline of some 630,000 yearly, was partly offset by the natural increase in farm population. The total number living on farms in the United States dropped from 31,614,000 (on 6,448,343 farms) in 1920, to 30,169,000 (on 6,288,648 farms) in 1930.⁴

American agriculture also played an important indirect rôle in the rapid expansion of American industry,* which required a rapidly increasing supply of workers without land and without property. Some of these workers were drawn from the families of farmers in the United States, but so long as American agriculture was also expanding the farms provided a limited supply of wage workers for industry. The masses whose labour built the mines and factories and the great fortunes of American capitalists were drawn chiefly from European peasant farms where poverty had been made more desperate by the competition of wheat and meat animals sent into the European market from farms in the United States and Canada. The greater productivity of labour on these western farms could underbid the backward technique of the peasants. So the very process of expansion in American agriculture which tended to limit the supply of American-born wage labour helped to swell the masses who could be drawn into American industry from the rural population in Europe.

* See footnote on page 19.

The total number of farms increased until 1920, but the ratio of farmers and farm workers in the total "gainfully occupied" population fell from 63% in 1850 to 29% in 1920. During the next ten years this trend was intensified, as agriculture entered a period of crisis and depression while total industrial production and non-productive employment were booming. So many farms were given up that in 1930, for the first time in our history, the total number of farms was less than it had been ten or even twenty years earlier. The ratio of farmers and farm workers among all "gainfully occupied" dropped sharply from 29% in 1920 to 21.4% in 1930.⁵

Then during the economic crisis of 1929-33, the millions drifting back to the land almost equalled those who were leaving. The number of farms reported by the Census of Agriculture in 1935 was the highest on record. This did not, however, represent further expansion of agriculture. Crop acreage had declined.

	1935	1930
Farms	6,812,350	6,288,648
Land used for crops (harvested plus crop		
failure)	359,306,000	371,949,000
Other farm land available for crops (crop		
land idle or fallow, plus ploughable pas-		
ture)	154,608,000	150,447,000

Failure to accumulate a proportionate share of wealth from farm operations has been only one of several factors in this declining relative importance of agriculture. Among others, the first and most obvious factor was the increasing social division of labour, as industry based on mechanical power encroached on the varied activities of the old-time farm. Textile mills were so much more productive than hand spinning and weaving on scattered farms that these hand processes, very costly in human labour, were no longer worth while even for the leisure of winter evenings. Tanning, cotton ginning, slaughtering, soap making were among the many other processing labours that passed from the farm to outside industry. Even the churn in the farm pantry is fast yielding to the outside creamery. Three-fourths of the total butter made in the United States and more than 90% of the butter sold are now a factory product. Second, while old-time crafts were taken over by industry, other new industries and occupations grew up around the manufacture of machinery, the building and operation of railroads, the growth of cities, the use of electricity, the advance in chemical knowledge and the invention and perfecting of the internal combustion engine.

And, third, industry after the Civil War began to offer substitutes for farm products. For example, candles and mutton fat were displaced by kerosene and mineral lubricating oil. Vegetable dyes were displaced by coal-tar products. Mineral fertilisers were developed that can supply the deficiencies of the soil more exactly than cow manure. Since the World War artificial fibers have offered serious competition to cotton. And, most important of all, the number of work animals raised on farms and fed with oats, corn and hay has declined sharply with the increase in automobiles, motor trucks and tractors fed with oil and gasoline.⁶

Agriculture expanded until the 1920's, but industry grew faster than agriculture. Estimates going back to 1870 indicate that during the sixty years to 1930 total production, in all fields of activity combined, increased about twice as fast as population. Even crop production increased faster than total population, but much more slowly than manufacturing, construction, mining or transportation.

AVERAGE	ANNUAL	RATE	OF	GROWTH:	1870-1930 7
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	Per cent
Population	1.9
Crops	2.2-2.5
Construction	4.2
Manufactures	4.3
Railway freight	4.7
Mining	5.7
Total production	3.7-3.8

These averages do not, of course, imply that any type of production grew steadily from year to year throughout this period. Notably, crop production expanded more slowly after the 1890's than in the earlier years when good unsettled land was abundant and population was growing most rapidly. During the first thirty years of the present century, the total volume of agricultural output (crops and livestock combined) increased less than total population. It lagged even more than before in relation to industrial production.

PERCENTAGE OF INCREASE:	1899-1929 ⁸
Population	62
Agricultural production	52
Manufactures	208
Minerals	269

From 1899 to 1929 the physical volume of manufactured products grew about four times as fast and the production of minerals about five times as fast as agricultural output. At the same time, "value added by manufacture" was 28% above the total value of farm products in 1899 and 183% above it in 1929.⁹

Industry Raises Farmers' Productivity

After industry had begun to take over spinning and weaving and other processes which had been an integral part of farm work, it also began its long and still continuing influence on methods of work on the land. Encroachment upon the farmer's activities and increasing social division of labour made it necessary for him to get more products from the soil. He must have more cash to buy the products of industry. He and his family must be able to cultivate a larger acreage if it was to support the same number of persons.

This was acutely realised after the War of 1812 when the industrial system took firm root in the United States. The war stimulated manufactures, through the cutting off of foreign trade and the placing of large government orders which were especially adapted to factory production. A writer in 1819 stated:

"The immense capital which had been employed in commerce, previously to the restrictions, was transferred to manufactures, and workshops, mills and machinery for the fabrication of commodities were erected, as if by enchantment."¹⁰

So it was not by chance that many of the horse-drawn implements which brought the first revolution in American farming technique—as they gradually displaced the cradle, the hand rake, and the threshingfloor—were invented within the single decade of the 1830's. Experimental at first, they were rapidly improved and passed into factory production. The market for them boomed in the North during the Civil War and continued to expand. Western grain areas were developed on the basis of horse-drawn reapers and binders and mechanical threshers. By 1900 the use of some farming equipment powered by horses or mules was fairly general.¹¹ A whole battery of labour-saving farm tools awaited the advent of the gasoline tractor.*

These implements drawn by horse or mule and displacing traditional hand work in the fields, were the first stage of a technical revolution on American farms. How greatly their general use raised the productivity of farm labour is suggested by an estimate published by the American Economic Association in 1904. According to this estimate, the crops of 1899 would have required 79% more labour days than were actually worked on the farms in that year, if they had been raised and gathered by methods prevailing before the Civil War.¹² Or comparing the averages for 1878 to 1882 and for 1898 to 1902, the total man-labour hours spent on the farms in producing a given volume had declined by 33% in wheat, by 18% in corn, and by 6% in cotton.¹³

In the 19th century also a second stage in the technical revolution in agriculture was already being prepared. For science, that was actively serving industry and developing new methods and new products, was at the same time building up a technique and a body of knowledge from which grew the various branches of modern scientific agriculture or agronomy. Chemists were making basic discoveries toward the conserving and enriching of the soil. Biology was exploring ways to control the diseases of livestock and the pests which destroy crops. Scientific breeding for better meat, thicker coats of wool, larger yields of milk, was under way.

Only in the 20th century was mobile mechanical power applied to work on the land in a really adaptable and successful form. The introduction of the modern tractor marked the third, and most important, stage in the technical revolution of agriculture. But as yet only a small minority of all farms possess a tractor, one in seven in 1930 and over

^{*} Steam tractors had been tried in the 19th century but in the United States these were never widely adopted.

one in six in 1937.¹⁴ The great majority of farms have not gained the benefit of the latest improvements, saving labour and cutting cost.

Technical education of farmers, improvements in seed and in livestock breeds, and the mechanisation of the larger farms, which produce more than half of the total agricultural output, combined to increase the productivity of labour on the land. Average output per year of farm work is estimated to have risen by about one-third during the twenty-year period preceding the economic crisis of 1929-33.¹⁵ As in industry, so also in agriculture, the post-war years saw a marked increase in total production with some decline in the total labour force on farms.

This continues a long-time trend which has been reducing the number of persons required to operate a farm of a given size, or to provide food for a given population. "In 1787, the year the Constitution was framed, the surplus food produced by 19 farmers went to feed one city person. In recent average years 19 people on farms have produced enough food for 56 nonfarm people, plus 10 living abroad."¹⁶

Improved farm technique has increased the population drive from farming to other occupations. How has it affected those who remained on the land?

If farmers were producing for their own use, every labour-saving advance would be of direct benefit to them. They could raise more food with less back-breaking toil. They could get a larger output from a given acreage. But production for home use is a very small part of the total. Farmers have always raised a surplus to sell. As expanding industry and the increasing non-farm population offered a rapidly widening market for farm products, farmers naturally increased their output raised primarily for sale. And just as soon as cost and price and markets take a primary place in the farmers' reckoning, advance in technique involves a crisis for the backward farms.

We return to this subject in later chapters, since we have in this process a basic factor in the capitalist development within agriculture.

Monopoly Pressure on Farmers' Income

Advancing farm technique could be the source of great benefit to the non-farm population. It has raised to unpredictable limits the possible production of food. It has reduced the value of farm products needed by the city masses.¹⁷ But the city masses have not had direct dealings with the farmers. Between these two groups of producers who need each others' products and who should mutually gain from every advance in productivity, the capitalist world sets up barriers which divert to the industrialist and the banker much of the gain from advancing technique. While these exploit industrial wage-workers by appropriating surplus value, they have also developed a complex apparatus for appropriating much of the value produced in agriculture.

For the inner drive of the capitalist system is toward profits and accumulation by every available means. Privilege and monopoly are bred in the bone of capitalism and find their highest development with large-scale industry. Agriculture, with its more than six million farmers, has not yet outgrown the stage of free competition in production. For most farm products, the scattered individual farmers have not created marketing outlets of their own, strong enough to bargain on equal terms with the small groups of wealthy traders and processors.

Monopoly exploitation of the farmers is an old problem which has gone through many phases with the increasing complexity of capitalist economy. It antedates the farm machinery "trust" and the milling, packing and dairy corporations of the present day.

Railroads were the first great industrial monopolies with which the farmers came into obvious and immediate conflict. Transportation costs have always cut into the prices that the farmers themselves receive for their products, and high railroad rates were an acute farm issue in the days of the railroad pirates after the Civil War. Western farmers were roused to organised action leading to federal regulation of interstate transportation. During the World War, when the railroads were operated by the government, freight rates were increased far less than other prices. But extremely serious for both farmers and city consumers were the sharp increases put over by the railroad companies when the lines were returned to private operation. This occurred at the very time when farm prices tumbled in the post-war crisis. Freight rates have remained at levels out of relation to other post-war price trends. Comparing farm prices and freight rates in 1937 and in 1913, the U. S. Bureau of Agricultural Economics gives us the following:¹⁸

	(1913 equals 100)		
	Farm prices	Freight rates	
Beef cattle	118	156	
Sheep	98	141	
Hogs	127	145	
Wheat	121	138	
Cotton	67	101	

Farmers won regulation of railroads, but the regulated rates of recent years have exacted tribute from the farmers on grossly inflated railroad capital.

Western wheat farmers are also subject to special exploitation by the railroads and their allies of the Chicago Board of Trade, the "wheat pit." Actual shipment of grain to Chicago and storage in the monopolistically controlled elevators are required by the rules of the wheat pit. The number of concerns operating elevators accredited by the wheat pit for futures trading had fallen from 11 in 1920 to six in 1935, and three of these rule 85% of the total storage space. Railroads own the grain elevators, not only those in Chicago but a high percentage of the space in other terminal centres. In Chicago, the railroads lease their elevators to the big grain traders "at nominal rates," but they lose nothing since they add the cost to the freight rates that farmers must pay on all grain. In addition, they handle the large volume of business that results from the needless shipping of grain on "joy-rides" to and from Chicago as well as from the charges for storing it in railroad-owned elevators along the rights of way.¹⁹

In selling his product and buying tools, supplies, clothing, building materials, and foods not raised in his neighbourhood, the farmer used to be subject to pressure from local monopolies. This is illustrated by a pioneer community in Kansas, described by John Ise:

"In the first few years of that community, there was only one store within a radius of sixty miles, and this store afforded the only market for the settlers' products, and the only source of practically all goods purchased.... When the railroad came, a town sprang up, but much of the business was monopolised as before.... The grain elevator which came with the building of the railroad monopolised the grain market for years, and one cattle buyer bought most of the cattle that were shipped out of town."²⁰ Farmers in that community could reach a "somewhat competitive" market only by hauling grain twenty miles or more to another railroad. One bank had a near monopoly and charged a high rate of interest on farmers' loans. It proved "highly profitable." A local magnate also had a lumber yard:

"...farmers bought lumber for their new houses and barns at such monopoly prices that the lumberman was within a few years the wealthiest man in the community. When a threat of competition appeared, he built a second yard across the street to preserve his control of the market."²⁰

In most farm communities in the North and West, such local magnates have lost ground before the advance of larger monopolies. Mail order houses have underbidden the local stores, but the building supply companies, the fertiliser companies and the farm machinery "trust" have done their full share in holding up the prices of farm equipment and supplies, while the large-scale traders and processors have held down the prices paid to the farmers.

In the South, sharecroppers and poor share tenants are still tied to the plantation commissary or some other local merchant. These farmers are too poor to get ahead and every year they must have advances from the store on which to live while they are working on the cotton or tobacco crop. They still suffer under special exploitation from the local store which charges monopoly prices for goods and usurious interest rates for credit.

Price trends have been increasingly against the farmers since the World War, according to indexes compiled by the Department of Agriculture. Estimating prices received and prices paid by farmers it arrived at the following:²¹

	Prices received	Prices paid
1910-14	100	100
1915-20	170	160
1921-25	140	152
1926-30	141	152
1931-35	84	118
1936-38	110	125

No single year since 1920 has shown a price ratio in favour of the farmers' products. And post-war trends are merely a sharpening of differences which had been bearing down upon the farmers long before this "parity" period.*

All industries were profoundly affected by the economic crisis of 1929-33. Those controlled by a few large corporations which could halt production were in the strongest position to prevent sharp price declines. Farm implements as a group dropped only 14% between 1928 and 1932, and by 1934 their prices were moving upward again. Among twenty implements (not including tractors) listed by the Federal Trade Commission ²² only six were still in 1935 below their 1929 figure. Three years later (1938) every implement in the list had again been pushed upward and fourteen of the twenty items were costing the farmer from 10% to 26% more than he had paid before the crisis years.

No group of commodities purchased by farmers, except feed and seed, fell as sharply in price as every group of farm products. The relatively large decline in prices paid for feed and seed was less than the decline in prices received by farmers for cotton, grains, and meat animals. Even with these products circulating within agriculture there were middlemen operating against the farmers themselves.

DECLINE IN PRICES PAID: 1928-1932 23

	Per cent
Average, all commodities bought	31
For family maintenance	32
For use in production	28
Machinery	8
Building Materials	20
Equipment and supplies	22
Fertiliser	24
Seed	43
Feed	53

* Protective tariffs have always operated directly against the farmer by holding up the prices of manufactured goods. They have served only a fraction of the American people, and chiefly the capitalist owners of protected industries.

DECLINE IN PRICES RECEIVED: 1928-1932	23
	Per cent
Average, all farm products	56
Truck crops	36
Chickens and eggs	46
Dairy products	47
Fruits	53
Meat animals	58
Grains	66
Cotton and cotton seed	69
Miscellaneous products	50

After four years of "recovery" and a government drive toward prewar parity, farm prices were still relatively lower than prices paid by farmers for industrial products. And with the downward turn beginning in mid-1937, farm prices again dropped further than others.

PRICE INDEX, AVERAGE, JANUARY TO JUNE 24

			Per cent
	1937	1939	of decline
Prices paid by farmers	133	120	9.8
Production goods	140	122	12.9
Family living	128	119	7.0
Prices received for farm products	128	91	28.9

But while the crisis was a primary factor in the extremely sharp drop in farm prices after 1929, we have abundant evidence that monopoly pressure from processors has also played an important longtime rôle in holding down prices paid to farmers for many basic products. Most obvious to-day are the giant millers and bakers, canners and meat packers, dairy trusts and tobacco manufacturers, which under cover of performing a genuine economic function push down prices paid to the farmers and push up the prices they extract from consumers. In later chapters prices and markets will be discussed in some detail. For the moment we merely note the contrasts between the high degree of concentration among processors and the extremely scattered production on farms.

The following data on processors in 1934 are based on the Agricul-

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FARMING PART OF CAPITALISM

tural Income Inquiry of the Federal Trade Commission. Output percentages refer to the total commercial output of the given product.

NUMBERS OF PROCESSORS AND FARMS, BY COMMODITY

	Processors ²⁵	– Farms	
		Per cent	
	Number	of output	
Wheat	13 milling companies	65	1,363,471
	10 baking companies °	30	
Cattle and			
calves	3 meat packers ^b	41	550,042 °
Hogs	3 meat packers ^b	25	
Milk	6 dairy & packing companies	32	893,431 4
Tobacco	5 American companies	57	422,166

"As of 1933. Largest three bread bakers—General, Continental, and A & P—produced 19% of all wheat flour bread.

^b For cattle and calves: Swift, Armour, Cudahy; for hogs: Swift, Armour, Wilson. ^c No data for 1934. The 1930 census reported 71,000 stock ranches and 479,042 animal-specialty farms, the vast majority of which were raising meat cattle, hogs, or sheep. In addition an unreported number of other farms also sold livestock for meat.

^d No data for 1934. In reporting on 1929 sales of dairy products, the 1930 census gives a total of 2,882,858 farms selling dairy products, with four overlapping divisions. Besides the 893,431 farms selling whole milk, it reported 1,556,487 selling cream as butter fat, 68,030 selling cream not as butterfat, and 643,994 selling butter.

Canning and freezing take an increasing share of the vegetables and fruits. Nine companies dominate the canning of fruits and vegetables, while the 1930 census reported 627,452 farms raising vegetables for sale (including 84,561 specialised truck farms) and 141,418 specialised fruit farms. For those vegetables of which more than half the total crop was processed, the following numbers of farms were reported:

Tomatoes	234,328	Beets *	7,807
Green peas	95,351	Asparagus	27,252

Many of these farmers suffer not only from the monopoly processors but from the competitive policies of large-scale capitalist "farmers" whose interests are interlocked with the canners. This is conspicuously true in California.

• These do not include sugar beets of which the entire crop is raised under contract with refining companies.

Some of the methods by which these small groups of large companies work together to their own advantage and the farmer's loss are shown by the Federal Trade Commission, in its Agricultural Income Inquiry. Monopoly control over the processing of tobacco is more extreme than that over any other agricultural product. Buying operations are carefully controlled so that no one company will send up the price in a given region. The buyers for the Big Three (American Tobacco, Liggett & Myers, and R. J. Reynolds) together with those of the next two smaller companies take 57% of the total United States crop. Much of the remainder is taken by two British companies. In this way, no company worries about meeting its requirements, and so little competition occurs that a whole warehouse full of tobacco is auctioned off in a few minutes.

The FTC states that the price paid to the farmer for his tobacco has no relation "to the manufacturers' ability to pay." In 1931, for example, the farmers got 130 million dollars for their total tobacco crop, or 55% less than they got in 1929. The net profits of the Big Three, however, amounted to 119 million dollars, or 25% more than in 1929.²⁶ Evidently, the "dissolution" of the tobacco trust in 1911 affected the technique but not the fact of monopoly.

The big dairy companies and the meat packers are also scored by the FTC report for their methods of holding monopoly control and exploiting both farmers and consumers. We return to this in our special sections on livestock and dairy farming.

Food processors, as a group, have held up their profits since the crash of 1929 better than almost any other section of American industry. "These industries whose operations are carried on in that magnificent margin between the approximately six billion dollars United States farmers receive for their foodstuffs and the twelve billion dollars United States consumers pay for them were none of them seriously pinched by the depression. And now, even on the vastly inflated valuation of these industries, we see net profits ranging in some instances to more than 25 per cent." This was the considered statement in April 1937, of a former Assistant Consumers' Counsel of the Agricultural Adjustment Administration.²⁷

Poverty of Agriculture as a Whole

While processors and farm implement manufacturers have flourished, agriculture has become the poorest section of American economy. It produces in dollar totals less than half its proportionate share of the total national income. Farm workers, including farmers, family workers and wage-earners, were in 1929 just over 21% of the gainfully occupied persons in the country, but their products represented about 10% of the total output—as measured by current prices. Even this small share of income produced overstates the income actually available for continuing the process of farm production and maintaining the farm population. For it is further reduced by the toll of interest and rent which in 1929 passed on to non-farm mortgagees, banks and landlords about one-seventh of the income produced by agriculture. The counterflow of income received by farmers from non-farm capital was negligible.²⁸

After paying its toll of rent and interest to non-farm capitalists, the farm population—representing one-fourth of the total in the United States—had an income from agriculture which represented less than 9% of the total national income. (See Appendix B.)

It is true, of course, that the farm population had some supplementary earnings from labour away from the farm. About two million farmers reported work off their farms in 1929 and also in 1934. In the later census year, at least three out of four of these farmers were doing non-agricultural labour. Also some 465,000 members of farm families living at home and included in the farm population brought in earnings from non-farm occupations.²⁹ Such supplementary income helps to maintain individual farm families. And such work is another important link between agriculture and industry. But these supplementary earnings do not affect the basic fact that agriculture as such provides farmers and farm workers with less than half their proportionate share in the total national income.

Even allowing for supplementary income, farm families are still much poorer than non-farm families. Brookings Institution estimates the family income distribution of American families in 1929 as follows: ³⁰

Income class	Farm families	Non-farm families
Under \$500	25.0	3.0
\$ 500 to \$1000	29.5	9.6
\$1000 to \$1500	17.3	21.9
\$1500 to \$2000	10.5	18.9
\$2000 to \$3000	10.6	21.1
\$3000 to \$5000	5.7	15.4
\$5000 and over	1.3	10.0
All	100.0	100.0

Even this very conservative estimate shows that among farm families the percentage having net income less than \$1,000 from all sources combined was in 1929 more than four times the corresponding percentage among non-farm families.

Figures for any one year tell only part of the story. More important is the broad basic trend. Agriculture's contribution to the national income has dropped more sharply than the ratio of farmers and farm workers in the total gainfully occupied. In 1910 farmers and farm workers were 34.8% of the total gainfully occupied and in 1909 they had contributed nearly 19% to the total national income.31 Twenty years later, farmers and farm workers were only 21.4% of the gainfully occupied, but their contribution to national income had dropped to about 10% of the total.32 This trend, which had begun before these years for which estimates are available, was interrupted by a spurt of high farm prices and rising farm share in total income during the World War. After 1920, the farmers' share moved steadily downward during the years of industrial "prosperity" as well as during the crisis years of 1929-1933. After 1933 the farmers' share was slowly restored to the 1929 ratio. But farm income and total national income have remained far below the 1929 levels.

In 1937, per capita income of the farm population was estimated at \$196 as against a per capita income of \$655 for the non-farm population.

Farmers have smaller incomes than business men in any other large industrial group.³³ Farm wage workers are paid less than other wageearners. Large sections of the farm population have been pushed down

	Farm population	Non-farm population
1929	\$240	\$817
1930	188	678
1931	122	538
1932	79	401
1933	105	416
1934	138	483
1935	163	524
1936	185	598
1937	196	655

PER CAPITA INCOME: 1929-1937 84

to a destitution comparable only with the plight of the unemployed masses of city wage-workers.

But while agriculture as a whole has declined, it has also developed class differences among farmers, and sharper contrasts than formerly between large capitalist farmers and the wage workers whom they employ.

CHAPTER III

Large Farms and Small

WIDE differences in scale of operation appear among American farms. In 1929, the half which were smallest produced less than one-sixth of the total output. The 4% which were largest produced more than onefourth of the total.¹

DISTRIBUTION	OF	FARMS	AND	FARM	PRODUCTS	BY	GROSS	INCOME:	1020-1020
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Gross income groups Total	<i>Farms *</i> 6,288,648	Farm products ^a \$11,234,200,000
	100.0	100.0
Small farms		
Under \$600	29.2	б.1
\$600-\$999	20.6	0.5
Medium-sized farms		9.5
\$1,000-\$1,499	15.6	11.0
\$1,500-\$2,499	16.0	17.7
\$2,500-\$5,999	14.8	-7.7
Large farms	-1	29.3
\$6,000-\$9,999	2.4	0.4
\$10,000-\$19,999	1.0	7.2
\$20,000 and over	0.4	9.7

^a Distribution of 288,766 unclassified farms is estimated. And distribution of farm products for all farms is estimated on basis of their gross income distribution. (See Appendices D and E.)

Or to point the contrasts even more clearly: More than a fourth (1,837,717 farmers) had gross incomes below \$600, while a few (less

than 25,000) had gross incomes over \$20,000. The poorest 29% averaged perhaps \$373 worth of gross output. The richest half of one per cent averaged around \$47,000 of gross output.

We do not here use acreage as a measure of size. A 100-acre western wheat farm is a small family concern on the ragged edge of poverty, while 100 acres of sugar beets or of cotton require a large amount of labor and yield a considerable income.

Gross income also does not tell us how much the farm family has to live on, for necessary costs are higher in some types of farming than in others. But gross income is the most dependable index to the scale of farm operation, and gross income groupings were given in the census of 1930 and the census of 1900. From them we can learn the relative importance of large farms and small farms, and the general trend in size of farm during the first 30 years of the present century.

When we say that half the farms had less than \$1,000 gross income in 1929, and nearly 4% had gross incomes of \$6,000 or over, we are not thereby defining the economic classes among American farmers. The three million small farms included some farms that were almost noncommercial, since their sales were very secondary to products used by the farm family. Mostly they were small commercial farms producing primarily for the market. Even in this low income group there were a few farms that employed a little wage labour. Among the 236,000 farms with \$6,000 or more of gross income there were both working farmers who employed some hired help and completely capitalist farmers who never soiled their own hands with labour in the fields or barns.

All these classes shade imperceptibly one into the other. The subsistence farmer who depends for cash income on other work takes the first step toward commercial farm operation when he sells any of his produce. He becomes a full-fledged commercial farmer, really dependent on the market, when his sales exceed his home-used product. All commercial production is tied in with capitalist agriculture, even when the farmer is still an individual producer employing no wage labour whatever.

When the commercial farmer employs even one wage worker for a few days at harvest, this individual producer takes the first step toward operating his farm as a capitalist. Farmers employing some wage labour but still working themselves on the land represent the early stages of capitalist development *within* agriculture. They step over another boundary into completely capitalist operation when the farmer no longer works himself on the land and becomes only a supervisor of hired labour.

For the moment, however, we are not concerned with these economic classes, to which we return for fuller discussion in the next chapter, but merely with showing the relative importance of large farms and small farms.

Years since 1929 with low prices and "natural" calamities have swept tens of thousands of medium-income farmers down into extreme poverty. Of course failure to make a living on the farm is nothing new. But as long as plenty of free land and cheap good land were available, many discouraged farmers moved westward and sought better luck on another farm. And while non-farm industry was rapidly expanding, many who failed on the land shifted into other occupations instead of falling into the ranks of very poor farmers.

The economic crisis of 1929-1933, from which the country has never fully recovered, has practically destroyed the farmer's possibilities of shifting into non-farm work. Increasing percentages of poor small farmers have long been a normal trend in the older capitalist countries. This has now, since 1929, become the "normal" trend throughout the United States also.

A clear picture of gross income groupings in agriculture before the economic crisis began in 1929 is essential. The long-time trend has been toward increasing production by large farms and a widening gap between the upper and lower groups. To see this clearly we must have in mind the regional differences within the United States. For each of the three broad areas—North, West and South—has its special historical background, and each has developed its own special pattern with varied types of farming. Such regional differences have helped to shape the problems of classes among farmers and of farm tenure which are discussed in succeeding chapters.

The North

More than half (52.7%) of total farm output in 1929 and 2,561,785 farms (41% of all) were in the 21 states of the North, ranging from

Maine to New Jersey on the Atlantic coast inland to the tier of prairie states from North Dakota to Kansas. They include the four divisions classified as New England, Middle Atlantic, East North Central and West North Central states.

Agriculture in the North has developed from a background of family farms. In the older states, east of the Mississippi, these were in the main unspecialised units producing for sale grain, livestock, milk, eggs, vegetables, and fruit. West of the Mississippi, the settlers tended to specialise in grain and cattle except for providing other food for their families.

If we measure agriculture by numbers of farms and total farm acreage, we find a marked decline since the 1880's in the North Atlantic states; a less marked decline after 1900 in the East North Central states; and expansion continuing until 1930 west of the Mississippi. But such figures tell only part of the story. Volume of farm output increased, even in New England, between 1900 and 1930.

Eastern grain acreage had dwindled as more and more western grain was poured into the eastern market and filled the holds of Atlantic freighters. Then western beef and pork, slaughtered in the Mississippi Valley, was brought east in refrigerator cars and captured much of the city trade. During the fifty years from 1880 to 1930, more than 18,600,000 acres were withdrawn from farming in New England and Middle Atlantic states and the number of farms declined by 31%. Most of the surviving farms have been changed into specialised units of production, many of them engaged in supplying perishable foods for the steadily expanding cities.

By 1900, one fourth (25.8%) of the farms in the North Atlantic states were specialised dairy farms producing nearly one-third (32.2%)of the total farm output in this region. Thirty years later, dairy farms were somewhat fewer but considerably larger. They were one-third (32.8%) of the smaller total of farms and produced nearly half (46.1%) of the total farm output. In addition to these specialised dairy farms, another 32% of the farms in this region in 1930 received some smaller part of their income from the sale of milk or a milk product. Second and third in importance to-day are specialised crop farms and poultry farms.

Dairy farms have required an increasing investment in high-grade

cattle and in the equipment necessary for meeting the standards of city milk supply. Most of the specialised crop farms in the Atlantic states represent highly intensive cultivation, involving many manhours of labour per acre. Poultry farms have also yielded a relatively large gross return for a small acreage. So the total product of agriculture in the North Atlantic states was no smaller in 1929 than 1899, in spite of the sharp drop in total farm acreage.

And in general we may observe that wherever the dominant types of farming are markedly changed, farm acreage ceases to be a reliable index of progress or decline. With the development of more intensive farming, the farm units are often larger (in investment and output) with a smaller acreage than formerly. Such trends may appear even without any shift in the type of product.

While a somewhat similar process has been occurring in the East North Central states (from Ohio to Wisconsin) the decline in farms and in total farm acreage began later and was much less sharp. Wisconsin, more than any other state in the union, has become primarily a dairy state, and dairy farms are important in parts of Michigan and Ohio. This great northern dairy belt now reaches also to the west, including a large section of Minnesota. In western Ohio, Indiana and Illinois, which are the eastern half of the corn belt, most of the farms show varying combinations of the corn-hog type of farming. Some specialise in raising corn for sale; others raise corn but get their chief income from hogs or cattle which they fatten with it for slaughter.

Specialised crop farms—fruit, truck, potatoes, tobacco, sugar-beets have also become important in parts of this East North Central region. They are more numerous and together produce a greater total value than the specialised crop farms in the North Atlantic states. But in relation to the whole agricultural picture of the North Central states they play a minor rôle.

West of the Mississippi, from Minnesota and North Dakota to Missouri and Kansas, farmers are predominantly concerned with corn, hogs, cattle and wheat. The western half of the corn belt, where the corn-hog type of farming prevails, covers all of Iowa and spreads over into the adjacent states. In North Dakota and Kansas wheat and cattle are the chief products.

Cutting north and south across the grain states from North Dakota

to Texas runs the boundary line between the humid climate of the Mississippi Valley and the semi-arid prairies. In this band of states, and further west, much land once perfectly adapted for grazing was ploughed and planted in wheat by the homesteaders and their successors. The drive for wheat in the World War and the advent of tractor and combine encouraged a rapid increase in grain acreage in this border territory and beyond. Sharp decline in wheat prices after the World War and again in the crisis of 1929-33, and the catastrophic droughts of 1934 and 1936, have intensified the special problems of this northwestern area.

Throughout the North, the general scale of farm operation was expanded during the first thirty years of this century. This is true, even when full allowance is made for the higher price level at the end of the period. Comparative data on gross farm income, as reported by the farmers themselves in the Census of Agriculture, are available for two years (1899 and 1929) which cover a decisive period including the World War boom and the reaction which followed. It witnessed the development of practical tractors and a wide range of technical progress. What does the comparison reveal?

Average volume of output per farm had risen about 27%. And more significant, the large farms reported 25% of the total production in 1929 as against 19% of the total production thirty years earlier. Throughout the comparison of 1899–1900 and 1929–1930, large farms refer to those having gross income of \$2,500 or over at the beginning of the period and farms having \$6,000 or over at the end of the period. Later we shall discuss the subdivisions among large farms in 1929.

NORTHERN FARMS

	1929-1930	1899-1900
Number of farms (1930 and 1900)	2,562,000	2,874,000
Average gross farm income (1929 and 1899)	\$2,311 °	\$795°
Large farms' share of total output "	25%	19%

^e Farms with \$2,500 or more gross income in 1899; farms with \$6,000 or more gross income in 1929. See pp. 71-72 and reference note 20, p. 298.

^b This includes estimate for 93,190 unclassified farms. Average reported for 2,468,595 classified farms was \$2,352.

Prices of farm products (Bureau of Labor Statistics index) were 129% higher in 1929 than in 1899. This \$795 average in 1899 was equivalent to \$1,821 at 1929 prices.

WHY FARMERS ARE POOR

Capitalist farms are more developed in the North Atlantic states than in the North Central states. Relatively more farms are in the over-\$6,000 gross income group, and the regional differences in type of farming make the \$6,000 minimum more nearly an index of completely capitalist operation in the East than in the Middle West. We return to this again.

				.9
Gross farm income groups	New England	Middle Atlantic	East North Central	West North Central
All	121,387	343,648	927,606	1,075,954
	100.0	100.0	100.0	100.0
				······
Under \$600	26.2	21.0	18.8	13.4
\$600-\$ 999	15.0	14.7	15.6	12.5
\$1,000-\$2,499	2 9.1	33.5	39.9	38.3
\$2,500-\$5,999	21.0	24.7	22.4	29.4
\$6,000-\$9,999	5.2	4.3	2.4	4.4
\$10,000-\$19,999	2.5	1.3	0. 6	1.5
\$20,000 and over	0.9	0.4	0.2	0.5
		•		

FARMS IN THE NORTH, BY GROSS FARM INCOME: 1020

" Not including 93,190 unclassified farms.

At the same time, every section of the North had a large quota of small farmers in 1929. Certain regions like the cut-over timber land near the Great Lakes are notably depressed areas, with settlements of very poor farms, wrongly classified by the census as "self-sufficing" because they sell less than half their product. But poor "self-sufficing" farms are scattered through every state, along with other low-income farms, more developed in commercial farming of every prevailing type.

Poorer farms with less than \$1,000 worth of gross output were nearly one-third of the total in the North. Farms selling less than half their product made up only one-sixth of this poor group, but at least four out of five of the poor farmers in the North did other work at some time during the year.*

Contrasts between large farms and small farms were most developed in New England. Here one farm in twelve had gross income above

* Part-time farming is discussed later in Chapter IV.

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6,000 as against one in twenty of the farms in the rest of the North; and five farms in twelve had gross income below \$1,000 as against four farms in twelve elsewhere in the North. Only in New England were nearly half (47%) of these who had gross farm incomes under \$750 working off their farms for at least 150 days during 1929. This further illustrates the relatively high degree of capitalist development in New England agriculture.

Family farming in the North has been based on farm ownership. But to-day almost half (48.3%) of the farm acreage in the North is owned by absentee landlords. (This includes the acreage operated by managers.)

When the Census Bureau made its first report on farm tenure in 1880, only one farm out of five in the northern states was operated by a tenant. In New England, only one farm in twelve was a tenant farm. During the next twenty years, which included a farm crisis throughout the North, the ratio of tenancy increased. Then from 1900 to 1930 sections within the North showed diverse trends. Tenants declined more than owners in the North Atlantic states until the percentage of tenants was lower than it had been in 1880. In the East North Central states, percentage of tenants remained almost unchanged. West of the Mississippi it rose sharply during the boom years of the World War and again during the reaction and crisis of the 1920's. The years of extreme crisis after 1929 increased the tenant ratio slightly in every section of the North.

PERCENTAGE OF NORTHERN FARMS OPERATED BY TENANTS

	1935	1930	1920	1900	1880
New England	7.7	6.3	7.4	9.4	8.5
Middle Atlantic	16.2	14.7	20.7	25.3	19. 2
East North Central	2 9.4	27.3	28.1	26.3	2 0.5
West North Central	42.6	39.9	34 .2	29.6	20.5

Throughout the North more and more farm owners were reporting mortgage indebtedness. Farm buyers found it increasingly difficult to achieve full equity. Owners having clear title mortgaged their farms to improve their equipment. And other owners expanded operations by hiring additional land. FULL OWNERS, FREE OF MORTGAGE DEBT, PERCENTAGE OF ALL FARMS: 1935²

New England	46.1
Middle Atlantic	46.2
East North Central	32.0
West North Central	19.8

In the North Atlantic states, at least four farmers out of ten were still unmortgaged owners of all the land they operated in 1935 but in the West North Central states only two farmers out of ten.

This decline in land ownership varies not only with certain regional factors but also with different types of farming. Within each division of the North, grain farms have an exceptionally high percentage of tenants; fruit farms, poultry farms and "self-sufficing" farms an exceptionally low percentage. Between these extremes are the tenancy rates among dairy farms and cattle or hog farms. At the same time, within each type of farming, tenancy is higher in the North Central states than in the North Atlantic states.

Although the percentage of tenants has increased markedly in the Middle West, and beyond the Mississippi now approaches the rate in the South, the problems are by no means identical in these two great sections of American agriculture.

With the increasing investment required for commercial farming, the unmortgaged owner-farmer operating no additional (rented) land has become the smallest farmer in the North. Of course there is no clear-cut division, for all tenure groups in the North—owners, part owners, managers and tenants—overlap to some extent in their scale of operation. But taking the average value of land and buildings reported for the several groups, the farmer who owns all his land and carries no mortgage now stands at the foot of the scale.

Largest of all are the farms operated by a salaried manager. These are less than one per cent of all farms in the North, but they have 2% of the total acreage and 3% of the farm value (land and buildings). They are most important in the North Atlantic states where they have 4% of the total acreage and 8% of the farm value.

LARGE NORTHERN FARMS: 1930

	\$10,000 or more	Manager farms
	gross income	employing wage labor
New England	4,212	2,336
Middle Atlantic	5,810	4,450
East North Central	7,709	5,427
West North Central	22,312	4,404

Among the farms of non-salaried farmers the largest are those operated by a farm owner who rents additional land. These are classified by the census as "part owners" and include both mortgaged owners and free owners having full equity in the land they own. Such farms are far more numerous than the manager farms and are especially important in the Middle West where they have more than one-fourth the total acreage.

Tenant farms in the North are larger and more valuable on the average than the farms of "full owners" (that is, owners renting no supplementary land). In the New England states there is little difference in acreage or in value between tenant farms and farms of "full owners," but from the Hudson River to Kansas and the Dakotas the average tenant farm is clearly larger and more valuable than the average farm of those who operate only such land as they own. We return in later chapters to fuller discussion of farm tenure under capitalism.

The West

In the Far West, which includes 40% of the land area in the United States, farms are relatively few and acreage relatively large. Its eastern boundary includes the band of states from Montana to Arizona, and the region as a whole is most varied with mountains and desert, dry prairies and rich valleys. Most of the public irrigation projects are in this region. It includes the 11 states classified as Mountain and Pacific. At the 1930 census, these states had 503,047 farms (8% of all) and produced 15% of the gross farm output.

Cattle grazing on public land had become an important business in the Mountain states long before the plough and the barbed-wire fence of the homesteader invaded the prairies. While cattle pounded over the range in increasing numbers, warning voices were raised that the public land was overloaded and the grasses and edible shrubs were being destroyed. But not until 1905 was any genuine regulation attempted, too tardy and too limited to prevent the continued stripping of much good grazing land with the attendant horrors of Dust Bowl and expanding desert. In the Great Plains country as a whole, grazing land was carrying in 1935 nearly twice the load of cattle that could have grazed without destructive results.³

Cattle kings, with hired cowboys, had early climbed to a dominating position. Grazing land was open to all, but water holes were relatively few, and the cattle owner who controlled water had a monopoly advantage over his competitors. Cowboys' sharpshooting was often more important for mastery at the water hole than for protecting their herds from attack.

Public grazing land is still an important factor for cattle men in the dry prairie states from the western part of the Dakotas to the Rocky Mountains and Texas, and also in the high plateaus between the Rockies and the coast. But ranches with great tracts of privately owned land now play the leading rôle in western livestock farming.⁴

Large ranches have grown larger, and at the same time thousands of small and struggling ranches continue to operate. Contrasts between large and small were much sharper in 1930 among the 55,000 ranches in the cattle country proper than in the corn belt and the wheat regions of the West North Central states.

STOCK RANCHES: 1929-1930

		Per cent in gross income gro		
	Total	Under St. 500	\$1,500-	\$10,000
Mountain states	30,106	34.4	\$9,999 50.0	0r over 15.5
Pacific states	8,457	26.3	51.3	22.3
Vest North Central	16,599	28.5	54.5	17.0
states	II,932	20.8	66.1	13.0
All other states	3,906	33.9	58.4	7.6
United States	71,000	29.8	54.4	15.8

In recent years, another type of livestock farming has been extended in the West. Most of the beef cattle and lambs raised on ranches are sold to farmers in the corn belt who fatten them, along with their hogs, and send them to Chicago and other packing centers of the Middle West. With the increase in crop farming in the Far West, corn-growing has spread into parts of the grazing states, and more and more of the cattle are being fattened and slaughtered outside of the corn belt proper. In the Far West such "animal-specialty" farms are still quite secondary to stock ranches and fewer of them have climbed into the top income groups. But even within this type of livestock farming the Far West shows sharper contrasts than are shown by other regions.

ANIMAL-SPECIALTY FARMS: 1929-1930

		Per cent in gross income gr		
		Under	\$1,500-	or over
	Total	\$1,500	\$9,999	\$10,000
Mountain states	14,984	27.4	61.5	11.2
Pacific states	5,136	36.4	56.5	7.0
Texas and Oklahoma	12,486	42.2	54.3	3.5
West North Central				
states	285,984	19.5	75.7	4.9
East North Central			,	
states	109,552	24.8	71.4	3.7
All other	50,900	48.5	49.0	2.6
United States	479,042	24.8	70.6	4.5

Medium-sized livestock farms of either type are relatively fewer in the Southwest and Far West than they are in the North Central states.

Crop farming has, of course, long since taken possession of great areas in the cattle country. Even stock ranches commonly raise some crops for winter feed, if not for sale, and some of the farms specialising in crops also sell livestock. Stock ranches on private land still occupy more than half the total "farm" acreage in the Mountain states as a whole and in Texas (of the West South Central states), but only in Wyoming and Nevada do they produce as much as half the gross farm income. In the cattle country of the Far West, crop farms, on

WHY FARMERS ARE POOR

which livestock is a secondary product or is not offered for sale at all, now produce a greater total value than the stock ranches and the animal-specialty farms combined.

DISTRIBUTION BY TYPE OF FARM OF TOTAL FARM PRODUCT: 1929

Total product	<i>Mountain states</i> \$719 million	Pacific states \$958 million
	100.0	100.0
Stock ranches	27.4	8.7
Animal-specialty farms	10.5	2.1
Crop farms	42.4	57.6
Dairy and po ultry farms	7.7	24.2
General farms	8.4	3.0
Self-sufficing and abnormal farms	3.8	3.4

For crop farming on the western prairies and in the Pacific Northwest, the settler's family farm was originally the chief unit of operation. Under the Homestead Act (1862) each settler with his family could occupy and acquire for a nominal sum clear title to a "quarter section" (160 acres) of which the settler must plough and cultivate a stated minimum in order to maintain his title. The "quarter section" was also the usual acreage for a farm purchased from the western railroads. This acreage, well adapted to family farming in the humid Middle West, was much too small to provide a good living on the dry prairies, but the acreage allotted under the Homestead Act was not changed until 1909. That year it was doubled, and again doubled in 1916. By that time the evils of continuous cultivation of the dry prairie soil were recognised, and the homesteader was allowed 640 acres with the proviso that they be devoted solely to grazing and stock-raising! As the Great Plains Committee reported to President Roosevelt in 1937:

"Thus the homesteader often had to plough when ploughing was harmful to the land, and he was sometimes forbidden to plough when ploughing might have been profitable and beneficial."⁵

Climate on the western prairies proved also to be more difficult than the settlers expected.

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"... the major wet period which followed the close of the Civil War happened to coincide with a period in our history when there was an eager westward movement of population.... With an optimism which ... frequently led to disastrous results, farmers and ranchers mistook a rainfall which happened for a period to continue above the critical 20-inch margin, for the permanent climate." ⁶

With small acreage and a succession of dry years, thousands of prairie settlers lost their land. Some remained as tenants, but mostly those who failed left the land while luckier settlers enlarged their holdings at bargain prices. Still many small farms remained in operation. In 1930, for example, 19% of the cash-grain farms in the Mountain states operated with a quarter section of land or less and 25% had less than \$1,000 gross income.*

Wheat heads the list of crops in Montana and Idaho and is second to hay in total value in Wyoming and Utah. In the humid valleys and irrigated areas, intensive farming has also made great progress, especially cotton in New Mexico and Arizona; sugar beets in Colorado, Idaho and Utah; potatoes in Idaho and Colorado; and truck and fruits in the southern irrigated sections of the desert.

Other specialised farms are more numerous than wheat farms in the Mountain states as a whole. Their average gross income in 1929 was larger and they showed more advanced capitalist development. They included a higher percentage of "manager" farms. Relatively more of these other crop farms were in the upper gross income groups, with 13.6% above \$6,000 as against 8.0% of the grain farms. Not only that, but a \$6,000 gross income represented a closer approach to a completely capitalist unit of operation in intensive crop farming than on the specialised wheat farm. (See table on following page.)

During the years of especially severe drought (1934 and 1936) it was the dry-farming grain farms that suffered most.

While these contrasts between large farms and small farms were developing, the ratio of tenancy was steadily increasing. In the Mountain states where crop farming was developed chiefly on free homestead farms by settlers after the Civil War, the ratio of tenants among all farmers other than stock ranchers had risen to 26.5% by 1930.

* Our figures refer to the census classifications with less than 175 acres. The "quarter section" (160 acres) does not appear in the census tabulations.

	Other specialised
Grain farms °	crop farms ^b
42,664	56,181
\$2,662	\$3,400
13.1	13.2
11.7	10.9
14.6	12.4
22.4	18.7
30.3	31.2
5.9	8.8
2.1	4.8
100.0	100.0
	Grain farms * 42,664 \$2,662 13.1 11.7 14.6 22.4 30.3 5.9 2.1 100.0

CROP FARMS IN MOUNTAIN STATES: 1929-1930

^a Chiefly wheat.

^b Cotton, truck, fruit, and crop specialty. These latter include hay farms and farms raising sugar beets, potatoes, beans, or other intensive crops.

In California, the small pioneer never had anything like a fair chance to get an independent foothold on the land. Ever since this territory was taken over from Mexico, it has been a paradise for the big land-grabber and crooked speculator in land titles. And when the bonanza wheat farms of the 60's and 70's had begun to decline—after years of mining the soil—the development of irrigation, with a relatively limited total area adapted to intensive cultivation, riveted the grip of the big owners more tightly than ever on the land.

After the gold rush of the 50's was ended, thousands who had been panning gold were stranded. They found it extremely hard to make headway as farmers, in face of monopoly prices for land, and their poverty gave the big landowners a ready-made labour supply for largescale farming. Although these earliest migratory workers have been followed by a long succession of other groups, including Chinese, Japanese, Filipino, Mexican, and now landless farmers from the Dust Bowl, California agriculture has continued to follow its own distinctive pattern. (On California, see Carey McWilliams, *Factories in the Field.*)

LARGE FARMS AND SMALL

More "farms" here than elsewhere are highly developed capitalist concerns, closely interlocked with bankers and with processing corporations. Very large farms are also numerous in Oregon and Washington, but nowhere in the country do large capitalist operations play such a dominant rôle, both in number and in their control of the agricultural situation, as they play in California.

Gross farm income groups All	Mountain states 229,534 100.0	<i>California</i> 128,725 100.0	Other Pacific states 119,183 100.0
Under Choo		20.4	25.2
\$600-\$999	13.0	10.7	14.6
\$1,000-\$2,499	31.0	26.0	28.9
\$2,500-\$5,999	23.7	24.5	21.1
\$6,000-\$9,999	5.9	8.5	5.7
\$10.000-\$10.999	3.2	6.2	3.2
\$20,000 and over	1.6	3.7	I.2

FARMS IN THE WEST, BY GROSS FARM INCOME: 1929

"Not including 25,605 unclassified farms.

Crop farming in the Pacific states is extremely varied. The Pacific Northwest is still an important wheat region with farms that led the country in the use of powerful reapers and binders and many-horse teams. Here was first used the combined reaper and thresher. California also has still some large wheat farms. In the Pacific states as a whole, one in seven (14.7%) of the grain farms reported a gross income of \$10,000 or more in 1929.

In California, of course, the fruit and truck farms entirely overshadow the grain farms, and even in Washington and Oregon they have a greater total output. All kinds of intensive crop farming, including cotton in southern California, have become the special field of very large capitalist operation. Taking fruit and truck farms by themselves, we find that in the Pacific states about one farm in six had at least \$6,000 gross income; in the North Atlantic states one farm in nine; in the Mountain states one farm in ten; in Florida, Delaware and Maryland one farm in thirteen; in the rest of the South and in the North Central states only one farm in eighteen.

		Per cent in gr	oss income group
	Total	Under	\$6,000
	number	\$1,000	or over
Pacific states	77,115	29.6	17.4
Mountain states	9,719	32.6	10.3
North Atlantic states	31,454	23.8	11.6
North Central states	35,540	35.4	5.6
Delaware and Maryland *	6,181	30.6	8.0
Florida *	19,524	48.6	8.1
Other South "	39,406	37.3	5.5
United States ^a	218,939	33.0	II.I
^a Excluding from total and	from those	"under \$1,000" the	numbers reported as
sharecroppers. When sharecrop	pers are ind	cluded as farmers we	have the following.
Delaware and Ma	ryland	6,456 33.6	7.6

FRUIT AND TRUCK FARMS: 1929-1930

		-,	mannoero rep
ecroppers. When sharecroppers are	included as	farmers we	have the fo
Delaware and Maryland	6,456	33.6	7.6
Florida	20,345	50.7	7.7
Other South	45,350	45.5	4.8
United States	225,9	78 35.0	o 10.8

At the same time thousands of small truck and fruit farms operating without wage labour were producing a gross income under \$1,000.* Where the large farms are most highly developed, the small commercial grower is being crowded out. So, in the Pacific and North Atlantic states which have the highest percentage of large fruit and truck farms we find the lowest percentage of small (under \$1,000 gross income) farms of this type; but even in these sections the low income groups included about one farm in four.

Although the small specialised farm becomes less important in relation to the market, the basic contrasts between rich and poor within agriculture grow sharper as capitalist farming develops. Taking all types of farming together, relatively more of the farms in the Far West than in the West North Central states had less than \$1,000 gross income in 1929, and a higher percentage of farmers did other work more or less regularly away from their own farms. New England leads the country in its high percentage of part-time farmers, but the Pacific states run a close second.**

* "Under \$1,000" fruit farms included some new large undertakings on which orchards were not yet producing.

** See special discussion of part-time farming, page 112.

These contrasts between large farms and small farms have grown very sharp in the Far West, and especially in California. And the medium-income farmer who tries to compete with his big capitalist neighbours has been losing his hold on the land. The ratio of tenancy is increasing but is still relatively low. In the Pacific states it is lower than in any other section of the country except New England. Here, as in New England, mortgaged owners outnumber tenants.

Free unmortgaged owners, operating only their own land, are roughly three in ten among all farmers in the Far West. They are relatively fewer than in the North Atlantic states but not yet so low a percentage of the total as in the West North Central states.

PERCENTAGE OF WESTERN FARMS OPERATED BY TENANTS

	1935	1930	1920	1900	1880
Mountain	26.6	24.4	15.4	12.2	7.4
Pacific	21.2	I7.7	20.I	19.8	16.8

FULL OWNERS, FREE OF MORTGAGE DEBT, PERCENTAGE OF ALL FARMS: 1935²

Mountain 32.7

Pacific 34.9

Some large farms and some small farms are found in each tenure group, but certain broad averages are clear beyond question. As in the North, manager farms are on the whole the largest in average value of farm and farm implements. Second in size are the farms operated by owners who have extended their farms by hiring supplementary land. Definitely smaller are the farms of tenants who own no land and of owners who hire no land. Smallest of all are the farms of free owners carrying no mortgage.*

The South

The South in this section includes the 16 states (and the District of Columbia) classified as South Atlantic, East South Central and West South Central. We have not attempted to separate from it Delaware and Maryland, although in many ways they are much more closely akin to Pennsylvania and New Jersey to the North than they are to

* In the Mountain states, mortgaged "full owners" had a slightly larger set-up than tenants. In the Pacific states, the tenants' farms were definitely larger than farms either free or mortgaged of "full owners" hiring no supplementary land. See Appendix I. Virginia and Tennessee to the South. Texas and Oklahoma form the western boundary of the region. At the 1930 census the southern states had 3,223,816 farms (51% of all) and produced 32% of the total farm output.

Shadows of its chattel-slavery past hang low over southern agriculture. Before the Civil War, slave-owners' plantations monopolised most of the best land of the southern states, from Virginia to Louisiana and eastern Texas. Smaller farms scattered along the borders of the choice plantation areas and climbing into the hilly regions gave a living of a sort to thousands of other white families. But their land was generally poorer, and in the cotton and tobacco states they played a minor rôle in the development of commercial farming.

When the nearly four million slaves were freed, plantation owners still held legal possession of the lands their slaves had cultivated. The former slaves hoped to be given land, and many of them remained for a while as free squatters, cultivating patches on the plantations where they had been slaves. But shortly it became clear that northern capitalists and their government would not allow any general confiscation and redistribution of land. Such a measure would undermine the general sanctity of private property in land and city real estate and was effectively prevented.⁷

Abolition of slavery to clear the ground for capitalist development was the historic function of the Civil War, but this revolutionary change was only half completed. Those who had cultivated the soil as slaves were not given land, and they were too utterly destitute to buy it or even to attempt a free cash tenancy. Independent family farms, raising commodities for the market and providing a basis for completely capitalist development, were still excluded from much of the best plantation land. At the same time, the plantation owners themselves made only half-hearted attempts at large-scale operation with wage workers. Most of them had lost heavily in financing the confederate government. They resented the independent attitude of their former slaves and declared that they could not be sure of obtaining the labour needed for cultivating and harvesting. So they set up a new semi-feudal relationship, in the sharecropping system. And they buttressed this with harsh laws against "vagrancy" and various devices for destroying the civil rights of Negroes newly granted by amendments to the federal constitution. Jim Crow has been perpetuated by custom and law in every detail of work and living.

Even so, thousands were able to break away and improve their farm status in the South.⁸ By 1900, the first census year for which general data are available on colour and farm tenure combined, 179,418 Negroes were operating their own farms in the southern states. The number was somewhat larger in 1910 and then held fairly steady from 1910 to 1920, when 217,589 Negro farm owners had 4% of the southern farm acreage. In 1920, owner-operators were 60.4% of white farmers in the South and 23.6% of Negro farmers. Thereafter the number of owner-farmers (whether white or coloured) declined, but the rate of decline was much sharper in the coloured group. After 1930 there was a slight upward spurt, the number of Negro farm owners rising from 182,000 in 1930 to 186,000 in 1935, but their total acreage continued to decline.

Farm ownership did not bring equal opportunity to Negro farmers. Even in the country there has been a definite unwritten segregation of areas where Negroes could buy land and other, better, areas from which they were in practice excluded as owners. Their farms have been smaller. Their land has been less desirable, both as to soil and location. And at best, Negro farm owners have been a very small percentage of all Negro farmers and farm workers.

Sharecropping has remained the peculiarly characteristic form of labour exploitation in southern agriculture. Devised to maintain the plantation owners' control over the Negroes who had cultivated their land, it has drawn in tens of thousands of white farmers who have been compelled by poverty to give up their independence. The more than three-quarters of a million sharecroppers in 1930 included almost as many whites as Negroes.

The cropper owns neither farm tools nor work animals. He must plant as the landlord directs. On some plantations he is called to work by the plantation bell that called his slave ancestors into the fields. And throughout the season the cropper and his family must accomplish assigned tasks in cultivating and harvesting. They may also be required to work at wages determined by the landlord on land outside of the cropper's farm. On some large plantations the croppers work "through and through" on the whole plantation, in gangs under a supervisor, and each cropper's "farm" has become merely a basis for reckoning payment when the crop is sold.

In three southern states the cropper is regarded under the law as a worker. And everywhere in the South the cropper receives, in practice, little or no protection from the property laws on the rights of tenants. At the same time he has no regular cash wage. Nominally half the proceeds of the crop on his "farm" belongs to the cropper and half to the landowner, and nominally they share equally the cost of seed and fertiliser. But the crop is sold by the landlord, and the settlement with the cropper is made on the basis of the landlord's reckoning.

This is complicated by the irregular advances received during the months preceding. For only once a year, when the crop is sold, is the cropper legally entitled to receive cash. From early spring until harvest, he gets "furnish" to live on, through a plantation commissary or a store to which the landlord takes responsibility for payment. Prices are pushed up, since sales are on a "time" basis, and in addition high interest charges are deducted by the landlord. Interest rates paid by croppers and share tenants were equivalent on the average to 37% a year in 1934, on 535 cotton plantations studied in detail.⁹ In the Mississippi Delta and Arkansas River regions they were above this average. Another study of cotton counties in Mississippi and Texas showed that time prices and interest charges combined to push the cropper's cost of supplies and purchased food 50% above the normal.¹⁰

Sharecroppers commonly believe that most landlords manipulate the accounting to prevent their getting ahead. To illustrate this popular belief, C. S. Johnson and associates in *The Collapse of Cotton Tenancy* tell the following:

"A tenant offering five bales of cotton was told, after some owl-eyed figuring, that this cotton exactly balanced his debt. Delighted at the prospect of a profit this year, the tenant reported that he had one more bale which he hadn't yet brought in. 'Shucks,' shouted the boss, 'why didn't you tell me before? Now I'll have to figure the account all over again to make it come out even.'"¹¹

Individual Negroes have been lynched for questioning the landlord's reckoning. And where the sharecroppers have begun to organise to improve their status, they have been met with intimidation and outbursts of mob terror.

Share tenants in the South, on "thirds" and "fourths," as distinct from sharecroppers on "halves," include many whose status is practically the same as that of the cropper. The share tenant owns a mule and farm tools. He provides his own seed and feed and more than half the fertiliser, and the landlord claims less than half the share tenant's crop. But thousands of share tenants are also on plantations, subject to the landlord's planning of crops and detailed supervision of work throughout the season. Others are farming more or less independently.*

Until 1930, share tenants, including croppers, were increasing in all the southern states. Their number had doubled between 1880 and 1900, and again it almost doubled between 1900 and 1930. By 1930, croppers and share tenants combined made up almost half (48%) of all the "farms" in the South. They had 29% of all the farm land and nearly half (47%) of the crop land harvested.

Croppers were not counted separately from other share tenants until the census of 1920, but during the ten years that followed their number had jumped from 561,091 to 776,278, or from 17.5% to 24.1% of all southern "farmers." And the land in cropper "farms" rose from 22,500,000 to 31,600,000 acres. Of the southern crop land harvested in 1929, 18% was operated by croppers (not including other share tenants). The percentage of Negroes was higher among croppers than among other share tenants and the cropper "farms" were consistently smaller than the others.

SOUTHERN FARMS BY TENURE: 1880 AND 1930

	1930		1880	
	Number	Per cent	Number	Per cent
Owners and managers Tenants	1,433,033 1,790,783	44·5 55·5	977,229 553,848	63.8 36.2
All	3,223,816	100.0	1,531,077	100.0

* Total numbers of share tenants and sharecroppers were approximately equal in 1930. But on 442 of the plantations included in the WPA study, *Landlord and Tenant* on the Cotton Plantation, there were 5,234 cropper families and 1,369 share tenants.

	Distribution by tenure		Average acreage		
	White	Coloured	White	Coloured	
All farms	2,342,129	881,687	130.3	42.9	
	100.0	100.0	acres	acres	
		<u> </u>			
Managers	0.7	0.1	1,651.4	321.8	
Owners	52.7	20.6	144.8	63.1	
Cash tenants	6.0	11.1	164.6	41.8	
Share tenants	24.3	23.6	99.7	48 .0	
Sharecroppers	16.4	44.6	51.2	30.5	

SOUTHERN FARMS, WHITE AND COLORED OPERATORS: 1930

Sharecroppers are, on the whole, distinctly poorer than share tenants, but both groups get a very small return for their labour on plantations. Average net incomes in 1934 on 646 cotton plantations covered in a sample study were only \$312 a year per family and \$71 a year per person for sharecroppers, and \$417 a year per family for other share tenants. Taking the broad averages, the sharecroppers' net income per capita and per family was highest in the Atlantic Coast Plain area and lowest in the Lower Delta. "In the latter area, the croppers' average net income amounted to \$38 per person, or slightly more than 10 cents per day." These figures include the value of food raised on the cropper's farm for family use.¹²

To earn this low income the cropper's wife and children must also work in the fields during the busy seasons. At Delta & Pine Land Co., for example, it is understood that all children six years old and over must help at least in the picking.¹³

With such low earnings, the cropper family often ends the year in debt to the landlord, and the system tends toward a form of peonage, holding the cropper on his "farm" until he has cleared the debt. Here much depends on the individual landlord. Some few, it is claimed, write off the debt as an expense of operation. At the other extreme, cases of actual peonage, where debt binds the sharecropper to his land, have been reported from many sections of the South. But most commonly if the cropper wants to leave a plantation his new landlord settles with his former landlord and the cropper starts on a new "farm" with the old debt still hanging around his neck. Croppers do move about a great deal, seeking always a better landlord and a better farm, but mostly unable to achieve, as individuals, a higher tenants status. The 1920 census reported that croppers who had been on the same farm less than two years were 55% of the total number; ten years later they were 63% of a much larger total. But trends were reversed after 1930, when cotton and tobacco acreages were reduced. The total number of croppers declined by about 8% between 1930 and 1935, and more of those who remained as croppers also remained on the plantations where they already had a foothold.

In the Mississippi bottom lands where the soil is richest, the croppers earn less than in any other region. Here their farms are smaller. Here also the exploitation through high store prices and usurious interest on advances is most severe. Possibilities of non-agricultural work have been fewer in Mississippi and Arkansas than in any other states of the Union. So although the cotton yield is high and the prevailing grades of cotton bring a relatively good price, the cropper families in the Delta have been poorer than those in any other section of the South.

The sharecropping system has its deepest roots in the cotton belt of the old South, where the percentage of Negro population is highest,* but it is important also in the tobacco counties of Virginia, North Carolina, Kentucky and Tennessee. It is bound up with hand labour and tends to break down as a system when the way is opened for efficient division of labour or for large-scale machine operation.

Already the use of tractors for preparing the ground, planting and cultivating on the cotton farms of the more open and level country in the Southwest has greatly increased the productivity of labour and cut the average costs of cotton production. It has shortened the season during which extensive use of hand labour is required in that region. So Texas and Oklahoma and the new irrigated cotton lands in New Mexico, Arizona and southern California show a relatively high percentage of large-scale capitalist cotton farms, using wage labour and machinery and drawing in masses of seasonal wage workers for the picking. Since 1935 tractor farming has increased also on the Delta cot-

^{*} Cropper "farms" had 36% of the crop land harvested in Mississippi in 1934, 30% of the crop land in Georgia, and 21% to 23% of crop land in the Carolinas, Alabama and Louisiana.

ton lands and uncounted thousands of croppers have been displaced.*

In the eastern coastal states much of the cotton land is ill-adapted to tractor cultivation. Here the landlords have faced special problems of several kinds, including severe boll weevil damage in wet seasons and loss of crop acreage through serious erosion. The once valuable Sea Island cotton area along the Atlantic coast was permanently devastated by repeated attacks of the boll weevil in the early 1920's. The cottons that have survived in the southeastern states are less valuable than the longer-staple cottons which have been produced in increasing volume in the Mississippi Delta and westward. With serious uncertainty as to the size of the crop and the money it would bring, cotton acreage showed a sharp net decline between 1919 and 1929 in the southeastern states. But until 1930 numbers of sharecroppers were increasing. Landlords were extending the cropper system which holds the labourers on the land until after harvest and at the same time passes on to them a large share of the risk.

Further west the growth of sharecropping went along with a definite increase in cotton culture, both in acreage and in its proportionate share in the agriculture of the cotton states.**

After 1932, benefits to farm operators under the AAA introduced a new factor in the situation. Croppers as "farmers" began to put forward their claims to the payments on acreage within their "farms," and some landlords evaded the issue by shifting croppers to a cash wage. Also, in the acreage reduction program, the cut was not always pro-rated among the croppers, but landlords not uncommonly withdrew entirely from cotton the "farms" cultivated by the least industrious or least docile croppers. As a net result, in three cotton states of

* On 12 plantations in the Yazoo-Mississippi area of the Delta, sharecropping had been giving place to wage labour before 1935.

	Percentage	of cropland op	erated by:
	Wage labour	Sharecroppers	Share tenants
1933	30	52	18
1934	40	46	14
1935	43	46	II
1936	47	43	10

In this study, the Department of Agriculture states that this is fairly representative of trends throughout the area. (U. S. Department of Agriculture, Technical Bulletin No. 682, May, 1939, pp. 52-53.)

** On trends in cotton acreage, etc., see Appendix C.

the old South (the two Carolinas and Georgia), in Florida, and in three states of the Southwest (Arkansas, Oklahoma and Texas) the number of sharecroppers declined markedly after the census of 1930. But in other sections of the South—especially in Kentucky and Alabama—their total number continued to increase up to the 1935 census of agriculture.

Taking the South as a whole, the census of 1935 showed 716,256 sharecroppers (as against 776,278 in 1930), occupying over 29,800,000 acres and cultivating 15% of the southern land used for crops.

Historically, the sharecropper status represents a survival of precapitalist relationships. When capitalism was expanding, the sharecropper was less well off than the wage worker. And the plantation economy, based on sharecropping, was a factor in the retarded development of capitalism within southern agriculture. Belatedly, in the crisis of the 1930's, the sharecropping system began to break down, as the plantation owners were driven by sharp competition and technical development to reorganise their methods of production. Now sharecroppers driven off the land are thrown into the mass of unemployed workers. They do not benefit from their release because they are now facing the destitution to which decaying capitalism condemns those workers whom it no longer finds it profitable to exploit. Displaced sharecroppers to-day fall into a poverty even more desperate than that which they endured from this semi-feudal form of tenancy. This makes it easy to forget that historically wage labour represents a distinct social advance over any feudal or semi-feudal relationship. It seems to justify the false current idea that sharecropping has always been a step above wage labour.

The plantation owner using cropper and share tenant labour operates all his land as a single unit. He commonly retains a sizable tract as his own farm, on which he employs wage labour to raise fodder corn and food crops and perhaps also some acres of cotton. But the whole concern is a business centred in a single commercial crop, supplemented by corn for croppers and mules. It uses both a semi-feudal form of labour exploitation and some wage labour, but its business outlook is identical with that of the large-scale capitalist farm.

Whether or not plantations have increased in size cannot be clearly established, since only once have the census tabulations recognised the plantation as an operating unit. A special study of plantation farming published by the Census Bureau on the basis of 1910 data showed 39,073 plantations operating one-third of the improved land in 325 southern counties. (Plantations with less than five tenant farms were not included.) Nearly one-third of these 39,000 plantations had ten or more tenants, and these larger operations had 18% of the total improved land in the counties studied. At the top were 412 plantations with 50 or more tenants, an average of 2,084 acres of improved land, and average value, including buildings, of \$103,002 per plantation.*

That the plantation form of large-scale operation was at least until 1930 extending its hold is unmistakably clear from the increase in cropping and share tenancy referred to above.

One plantation, the largest in the United States and one of the largest cotton-growing concerns in the world outside of the Soviet Union, occupies sixty square miles, has nearly 12,000 acres in cotton and uses 1,000 sharecroppers and their families. This Delta & Pine Land Co., with headquarters at Scott, Mississippi, is a corporation controlled by British stockholders and managed by an American, Oscar Johnston, who was finance director of the AAA in 1933 and later vice-president of the AAA's Commodity Credit Corp. with responsibility for managing the government cotton pool.¹³

Such size is an outstanding exception, even in the Mississippi Delta regions which have the highest ratio of large plantations. But among the 646 plantations in the WPA study representing eleven different areas (all east of Texas and Oklahoma), 40 had 1,000 acres or more in crops and 63 had thirty or more resident families (including sharecroppers, share tenants and hired workers. Just over half (55.4%) had only five to nine resident families and less than two-fifths (37.3%) reported under 200 acres in crops. (Like the old census study, this sample had excluded the small plantations with fewer than five families.)

* A study of unpublished census data for 1920 on all rented farms in selected counties showed the greatest concentration of ownership in western Mississippi. There more than one-fourth of all owners of rented farms had 5 or more farms, and their properties included 82% of all rented farms in the area studied. Also, a rough comparison with data for 1900 indicates that throughout the old South from Virginia to Mississippi concentration of ownership of rented farms had increased between 1900 and 1920. (See U. S. Department of Agriculture, Department Bulletin 1432, published in 1926.) Plantation farming is quite definitely a form of large-scale operation. And at least up to 1930 it dominated cotton production except in the newer regions of the Southwest. Net returns to the plantation operator vary greatly according to the size and business efficiency of his concern. The average shown in the WPA sample study was \$2,572 in 1934. This is roughly eight times as large as the average sharecropper income. Behind this average are the usual contrasts between the smaller plantations and the areas of poorer cotton, and large plantations in the still fertile regions with high-grade product. For the 29 plantations reporting in the Arkansas River region, for example, the operators' net income averaged more than seven thousand dollars. The giant Delta & Pine in 1936 cleared a net profit of \$153,604 after paying \$396,516 in salaries, bonuses and bond interest.

Many of the plantation landlords who exploit sharecroppers and share tenants have to pass on to bankers and mortgagees part of their spoils. In seven cotton states, the aggregate farm mortgage debt had almost guadrupled between 1910 and 1929, a rate of increase greater than that in any other section except the Mountain and Pacific states.¹⁴ On short-term debts for production expenses, the cotton landlord pays higher interest than farmers in other parts of the country. The cotton crop is regarded as a speculative security for short-term loans. So the landlord pays dearly for his credit, and then passes on advances to his tenants at a still higher rate of interest. On the plantations included in the WPA study, 44% of the landlords carried mortgages on which interest charges in 1934 averaged \$660 per landlord. And over half of all the landlords were carrying short-term loans averaging \$2,308. These were derived from various sources and drew rates of interest ranging upward to 36.8% reported as the average paid on merchant loans by four plantations in the Atlantic Coast Plain.

PLANTATION	BORROWING	FROM	SAMPLE	STUDY	OF	646 PLANTATIONS ¹⁵
	Pl	antation	s 7	otal am	ıoun	t Average annual
	b	orrowing		of loa	ns	interest rate
Government	loans	57		\$164,2	14	10.4
Merchant loa	ns	48 °		90,8	66	16.4
Fertiliser loar	ıs	7		3,4	22	21.1
Bank loans		225		484,0	66	15.2

^e Seven additional plantations reported merchant loans but amounts were not reported. ^b Sixteen additional plantations reported bank loans but amounts were not reported. Many plantation landlords have lost their land through foreclosures. This is the conclusion drawn by the Woofter report from its study of non-farm corporation landowners in 46 counties of three southern states (North Carolina, Georgia and Mississippi). Search of tax digests showed that, by 1934, 10% of the farm acreage in these counties had passed into the hands of insurance companies, land banks, depository banks or other types of lending companies.¹⁶ According to other estimates, areas amounting to 30% of the cotton lands of various states are owned by insurance companies and banks.¹⁷ This does not mean, necessarily, that the former owner leaves the plantation or that the plantation is abandoned. For plantation operators may be leasing the land for a cash rental and subletting to sharecroppers and share tenants. Or the former owner may be employed on salary to run the plantation for the new owner.

Semi-feudal plantation farming has grown and persisted as the dominant form of operation in cotton farming throughout the old

	Over \$6,000 gross in-		Over \$2,500 gross i			
	come,	<i>come</i> , 1929		come, 1899		
		Per cent		Per cent		
		of cotton		of cotton		
	Number	farms	Number	farms		
South Atlantic	1,057	0.3	2,228	0.7		
E. South Central	861	0.2	1,463	0.4		
W. South Central	6,269	0.9	2,533	0.6		
Arkansas	646	0.4	527	0.7		
Louisiana	206	0.2	850	I.I		
Oklahoma	1,102	I.3	64 °	0.3 °		
Texas	4,315	I.2	1,092	0.5		

LARGE COTTON FARMS: 1899 AND 1929 " (Not including plantation units operated with tenants)

^a Since the plantation as an operating unit is disregarded in the census, it is obvious that all the large cotton farms shown by the census are operated with wage labour. Allowing for changes in the price of cotton, it may fairly be said that a cotton farm with six thousand dollars gross income in 1929 was roughly equivalent to a cotton farm with \$2,500 gross income in 1899. Cotton farms, distinct from plantations, could not produce such a volume of product without wage labour, and the groups of cotton farms ranging upward from these amounts were completely capitalist concerns.

^b Including Indian Territory.

South. And these plantations based on sharecropping and share tenancy have retarded the development of large cotton farms operated on a completely capitalist basis. Some large-scale cotton farms operating with wage labour only are of course found in every area. But except in Texas, Oklahoma and Arkansas the number of such farms was definitely smaller in 1929 than it had been thirty years earlier. And only in Texas and Oklahoma had the percentage of large farms among all cotton farms increased.

While cotton is far and away the most important single crop, it accounts for less than half of the South's total agricultural output. Tobacco is more important than cotton in Kentucky, Virginia and North Carolina. Maryland and Delaware and most of Florida lie entirely outside of the cotton belt. Here specialised vegetable and fruit farms are most highly developed, and these are also numerous in many other sections of the South. Louisiana, Arkansas and Texas produce 85% of the rice grown in the United States. Sugar-cane, peanuts, and sweet potatoes and yams are all distinctively southern crops. Like cotton each of these specialty crops requires intensive cultivation and gives a high gross return per acre. Also, like cotton and corn they keep the soil uncovered to wind and rain and commonly increase the serious tendency toward erosion.

West of the Mississippi Delta, cotton's chief rivals are of a different type. The semi-arid plains of central and western Texas have remained an important cattle region. Wheat acreage is larger than cotton acre-

(1101 1110 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4		· ·	
		Over \$6,000 gros	ss (Over \$2,500 gros.	
		income, 1929		i ncome, 1899	
	Number	Per cent	Number	r Per cent	
outh Atlantic	13,492	2.0	7,303	1.2	
. South Central	5,305	1.0	5,35 ⁸	0.9	
V. South Central	16,479	4.3	7,105	2.0	
				—	
The South	35,276	2.2	19,766	1.3	

LARGE FARMS OTHER THAN COTTON FARMS: 1899 AND 1929^{*} (Not including plantation units operated with tenants.)

" See footnote " of previous table and reference note 20, p. 298,

S E V age in Oklahoma although the cotton crop has greater total value than the wheat crop. Wheat is also important in northern Texas.

Non-cotton farms were slightly more numerous in 1929 than they had been thirty years before. Except in cotton and tobacco sharecropping has been of minor importance and the increased production has been tied up with an expanding scale of operation. So while large-scale farms with wage labour were declining in the production of cotton throughout the old South, such farms were increasing in other commercial farming.* The non-cotton farms of the South included a greater number and a slightly higher percentage of large farms in 1929 than in 1899.

At the same time, a great mass of small poor farmers are also operating outside of the sharecropping system. In 1929, before the economic crisis had immeasurably darkened the entire picture, there were about a million Southern commercial farmers other than sharecroppers in the under-\$1,000 gross income class. They represented every type of farming and every state in the South.

In addition to its small commercial farms of various kinds, the South has a high ratio of small "self-sufficing" farms. (This term is misleading since they must sell something in order to exist, unless they depend wholly on outside earnings.) The valleys and lower slopes of the southern Appalachians (especially in Virginia, West Virginia, Kentucky, Tennessee and North Carolina) are the most extensive area of near-subsistence farming in the United States. Much smaller, but equally isolated from the main stream of trade, is the Ozark mountain region which includes parts of Arkansas and Oklahoma and reaches northward into Missouri and southeastern Kansas. Scattered throughout the South are other poor farms of this type.

On such farms, poor soil, poor livestock, poor seed, poor tools combine to hold down the productivity of the family's labour. Barely a third of the small total product finds its way to market. Some handicrafts have lingered on in the mountain farms, but in the main these families have to buy what they need for tools and clothing. Extreme

^{*} Except, probably, among tobacco farms. Census data on sharecropping, gross income, and wage labour are not shown separately for tobacco farms which are merged in the group of "crop-specialty" farms.
poverty, comparable to that of the poorest sharecropper, is all that the "self-sufficing" farm can provide. In the Ozarks, for example, money is so scarce and the standard of living so low that a World War veteran was looked up to as a man of substance because he received a small pension—the lowest amount paid for slight disability. His daughter was courted for her wealth by men from three counties.

More independent than sharecroppers, and usually owners of the land on which they live, these mountain farmers are free to seek supplementary work, but at best this is irregular and poorly paid. Tens of thousands of such families have in the past been drawn from their lonely destitution in the hills, selling their land to lumber or mining companies and moving away to the hard work and poverty of southern textile mill villages and mining camps. But other tens of thousands still remain on the land.

Of the 498,019 farms in the United States classified by the census of 1930 as self-sufficing because they sold less than 51% of their product, 341,199 were in the South. They constituted 11% of all southern farms. Of these farms about three out of four had gross farm incomes under \$600, including the products used by the farm family, and 98% had gross farm incomes under \$1,000. Closely akin to these "self-sufficing" farmers are those who live on the land and produce enough to be recognised as farmers by the census, but who work at some other job at least half the year. Classified as "part-time farms" in the census of 1930 were 143,910 southern farms, having less than \$750 of gross farm income.*

Since 1930, some of the sharecroppers who have been excluded from cotton farming have been allowed to remain temporarily in the shelter of their miserable plantation shacks and to cultivate a small patch of land for bare subsistence. Also during the crisis years, thousands of families returned to land they had abandoned in years when hope of jobs had called them to the cities. Such families account in large measure for the increase in owner farms in the South after 1930. All these crisis trends have increased by uncounted numbers the very poor, almost non-commercial farms throughout the South.

Sharecroppers and "self-sufficing" farmers weight heavily down-*But see discussion of part-time farming in Chapter IV. wards the income distribution of southern farms as a whole. In 1929 more than a third of all farms in the South had gross incomes under \$600 and nearly two-thirds had gross incomes under \$1,000. But not all the farm poverty is accounted for by sharecroppers and "self-sufficing" farmers. Even when these are counted out, over 45% of the remainder had less than \$1,000 gross farm income in 1929.* This is a higher ratio of low income farms than was reported for any other section of the country. And in the South, taken as a whole, relatively fewer of the very poor farmers—all types combined—had any considerable earnings from some other occupation. Here less than 9% of the farmers having gross farm income under \$750 in 1929 worked 150 days or more; in the rest of the country (all sections combined) 27% of the farmers having gross farm income under \$750 worked 150 days or more off their farms.

Since 1929, the only recent year for which broad general data on farm income distribution are available, poverty on southern farms has greatly increased. Cotton has faced a severe crisis which we shall discuss in a later chapter. This has affected directly more than half the farms in the South, cutting down the average gross income from cotton at the lowest point of the crisis to less than one-third of the 1929 figure.¹⁸ For sharecroppers, this has meant destitution; for landlords and other independent farmers, sharper contrasts between poor and rich, the many debt-burdened and the very few prosperous.

Furthermore, the years of economic crisis have checked migration of young people from southern farms. Outlets into industrial jobs have remained closed by the continuing mass unemployment in cities throughout the United States. Instead of sending about a quarter of a million persons each year to cities ¹⁹ the rural South since 1930 has had a rapidly increasing population dependent upon an agriculture in which the most important section (cotton farming) has been seriously depressed.

* Southern farmers, other than sharecroppers and self-sufficing were 2,132,059; and of these at least 1,000.000 were in this low income group.

Trend Toward Larger Farms*

Large farms have increased in number and in importance in the country as a whole and in the several regions. In the following comparison based on gross income figures reported by the individual farmers in the census of 1900 and the census of 1930, Group A corresponds to the large farmers in the list we have given on page 38. Group D is very small farms. Group C includes some poor farms and the smaller medium-sized farms.

During this thirty-year period, the increasing commercial importance of large farms stands out most clearly in the North, the oldest farming region that had developed from the beginning without slavery. Here the total number of farms declined as the poorer farmers gave up the struggle, while the farms with large gross income increased by more than one-fourth.

FARMS BY GROSS FARM INCOME GROUPS: 1899-1900 AND 1929-1930

	Numbe	Number of farms		
	1899-1900	1929-1930 ^b	of increase	
North				
Group D (very small)	605,229	445,990	26 dec.	
Group C	1,533,065	1,340,051	13 dec.	
Group B	633,031	643,888	2	
Group A (large)	102,748	131,856	28	
All	2, 874,073	2,561,785	11 <i>dec</i> .	
West				
Group D	73,499	113,636	55	
Group C	98,809	214,137	117	
Group B	45,509	114,453	151	
Group A	25,091	60,821	142	
All	242,908	503,047	107	
(11 11	and with notes	on next have		

(Table continued, with notes, on next page.)

*Throughout this discussion we refer to scale of operation as measured by gross farm income. Acreage trends are confused by shifts from one type of farming to other types representing increased investment and increased output per acre. Even within a given type of farming, increased investment and more efficient technique may increase the scale of operation without a corresponding increase in acreage.

	(Continuea)		
	Numbe	Percentage	
South	1899-1900	1929-1930 ^b	of increase
Group D	1,094,759	1,278,091	17
Group C	1, 349,040	1,727,705	28
Group B	150,602	174,557	16
Group A	25,990	43,643	68
All	2,620,391	3,223,816	23
UNITED STATES			
Group D	1,773,487	1,837,717	4
Group C	2,980,914	3,281,893	10
Group B	829,142	932,898	13
Group A	153,829	236,140	54
All	5,737,372	6,288,648	10

FARMS BY GROSS FARM INCOME GROUPS: 1899-1900 AND 1929-1930 (Continued)

"In comparing income groups of 1929 and 1899, price changes are important. On following groups, used in this table, see note 20 from this chapter.

INCOME GROUPINGS

	1899	1929
Group D	Under \$250	Under \$600
Group C	\$250-\$999	\$600-\$2.400
Group B	\$1,000-\$2,400	\$2 500-\$5 000
Group A	\$2,500 and over	\$6,000 and over

^b Includes estimated distribution of 288,766 unclassified farms. See Appendix D.

In the newer West, all groups increased as the total number of farms was more than doubled. Even before 1900 the West had developed a higher percentage of large farms, and in this thirty-year period the topmost group (A) increased slightly less than the upper group of medium-sized farms (B). But both these upper groups gained much more, relatively, than the smaller farms of groups C and D.

In the South, also, the total number of farms was greater in 1929 than it had been thirty years earlier, reflecting chiefly the increase in share tenants and sharecroppers of groups C and D. Large farms (Group A) were barely one per cent of all at the beginning of the period. They increased by two-thirds, but they were still very few (about 1.3% of the larger total) at the end of the period. Since plantations are excluded as operating units and plantation tenants appear in the lowest income groups, these figures greatly understate the extent of large-scale operation in the South.

Increasing numbers of very poor farms and smaller medium-sized farms in the West and South offset the decline in such farms in the North. But while the total numbers in the lower income groups increased in the country as a whole by more than 365,000, their percentage of increase lagged behind the percentage of increase in larger farms. Actual numbers in Group A rose from 153,829 (with incomes of \$2,500 or more) in 1899 to 236,140 (with incomes of \$6,000 or more) in 1929. This 54% increase was five times the average for all income groups combined and seven times the percentage of increase in the lower income groups (C and D).

How these changes affected the distribution of farms by gross income groups within each of the three great regions and in the United States as a whole is indicated by the following percentages.

PERCENTAGE	DISTRIBUTION	OF	FARMS	BY	GROSS	INCOME	GROUPS:
	I	899	AND I)2 9			

	No	rth	V	West			
	1929	1899	1929	1899			
Group D (small)	17.4	21.1	22.6	30.3			
Group C	52.3	53.3	42.6	40.7			
Group B	25.1	22.0	22.8	18.7			
Group A (large)	5.1	3.6	12. I	10.3			
				<u> </u>			
Total	100.0	100.0	100.0	100.0			
	Sou	ıth	Unite	d States			
	Soz 1929	<i>ith</i> 1899	Unite 1929	ed States 1899			
Group D (small)	Sou 1929 39.6	<i>ith</i> 1899 41.8	Unite 1929 29.2	ed States 1899 30.9			
Group D (small) Group C	Sor 1929 39.6 53.6	<i>uth</i> 1899 41.8 51.5	Unite 1929 29.2 52.2	ed States 1899 30.9 52.0			
Group D (small) Group C Group B	Sor 1929 39.6 53.6 5•4	<i>ith</i> 1899 41.8 51.5 5.7	Unite 1929 29.2 52.2 14.8	ed States 1899 30.9 52.0 14.5			
Group D (small) Group C Group B Group A (large)	Sor 1929 39.6 53.6 5.4 1.4	<i>ith</i> 1899 41.8 51.5 5.7 1.0	Unite 1929 29.2 52.2 14.8 3.8	ed States 1899 30.9 52.0 14.5 2.7			
Group D (small) Group C Group B Group A (large)	Sor 1929 39.6 53.6 5.4 1.4	<i>uth</i> 1899 41.8 51.5 5.7 1.0	Unite 1929 29.2 52.2 14.8 3.8	ed States 1899 30.9 52.0 14.5 2.7			

In every region, relatively fewer farms were in the poorest group and relatively more farms were in the richest group, but these differences were most marked in the West and the North. And yet even here, as well as in the South, the smaller farms (Groups D and C, with less than \$2,500 of gross income in 1929) were still the great majority of all farms: 65% in the West, 70% in the North, and 93% in the South.

Taking the country as a whole, the large farms of Group A remained less than 4% of all farms, but they increased their share in the total farm output from 20% in 1899 to over 26% in 1929. While the larger medium-sized farms of Group B held their own in relative numbers, their relative share in the farm output declined from 32% of the total to 29% of the total. The large farms of Group A gained their increased share in the total at the expense of every other group.

DISTRIBUTION	OF	FARM	output,	BY	GROSS	FARM	INCOME	GROUPS:
			1899 AN	DI	929 *			

	Per cent, 1929	Per cent. 1800
Group D (small)	6.1	6.6
Group C	38.2	41.4
Group B	29.3	32.1
Group A (large)	26.4	19.9
egional figures, see Appendix F	100.0	100.0

^a For reg

The smaller farmers held a declining share in the total output, and also their actual position had considerably worsened. Improvements are adopted by the most prosperous farmers and very slowly spread into more general use. The larger the investment required for producing at lowest cost or highest quality, the larger also is the minimum scale of profitable operation and the more hard-pressed is the small farmer. Bare figures of trends in distribution of farms and farm output by gross income classes do not convey the forces at work against the small and medium-sized farms. These forces we must now attempt to analyse.

CHAPTER IV

How Capitalism Develops Within Agriculture

TWO pictures etched in the writer's memory mark the road that agriculture has been travelling in the past hundred years. First is a spacious white house in the Connecticut valley, cherished by a little old lady who gloried in keeping intact all the apparatus of her grandparents' living. Wings, sheds and barn were full of out-dated tools and equipment: soap-vats, candle moulds, spinning wheels and all the rest. It was a complete and undamaged shell left behind by a farm which had been to a high degree a genuinely self-sustaining unit of production. It had been a prosperous farm, with house servants and field helpers, and the farmer had been a power in the community. Tapestries and choice furniture bespoke money, wealth and leisure. It was a far cry from the "natural economy" of feudal peasants under which they produced everything they used, but in a very real sense the farm was still a "way of life." Selling and buying were secondary to the home production of basic necessaries.

Contrast this ghost of a dead past with tobacco farms, also in the Connecticut valley, which are operated to-day as completely capitalist units. On some of these, even the farmer's house has disappeared and boss and wage workers come out daily from a nearby town. Nothing remains of the old-time farm but land and a work-shed for drying the tobacco and storing the tools. Horses raised on the farm and fed with hay and oats from the farmer's fields have yielded to a tractor dependent on purchased fuel. The entire product is raised for sale, and all the work is done by wage labour. The last trace of "natural economy" has vanished. Of course the contrast is extreme, but it underscores a genuine underlying trend which is basic to our understanding of the economic forces at work within agriculture. Looking back over the decades since mid-nineteenth century, with their revolutionary changes in farming technique and the greatly heightened contrasts between rich farms and poor farms, we find our primary clue in farmers' increasing dependence upon the market. We must have clearly in mind the degree to which farming has become a business, producing commodities for sale. For capitalism is rooted in commodity production, and the relations and contrasts characteristic of capitalist agriculture grow out of the pressure of the market and the farmers' dependence upon selling and buying.

Dictatorship of the market drives the individual farmer to raise the productivity of his labour, by improving his technique. This in turn pushes him to enlarge his scale of operation. Technical change and the employment of wage labour react each upon the other and draw the successful farmer nearer and nearer to a completely capitalist form of operation. Both imply increased investment in the process of production. The property of the working farmer becomes transformed into the genuine capital of the employer.

But most farmers who were moving up the scale with expanding operation were unable to accumulate from their own operations enough to finance their expansion. They became increasingly dependent on capital borrowed from the accumulations of non-farm capitalists. The various ways in which non-farm capital has penetrated agriculture are also an important part of the story.

Until recently the growth of large-scale farming with wage labour was most apparent in the North and West. In the South, cotton and tobacco plantations continued to carry on a semi-feudal form of largescale farming. Negro slaves and their sharecropper descendants were held on the soil by the Jim Crow system excluding Negro workers from all the better-paid industrial occupations. Plantation owners have had an abundant supply of destitute workers whom they could exploit to the limit. So long as American cotton from the old South held a virtual monopoly in the world market, large producers could follow the traditional plantation pattern, unworried by technical change or the urge to increase the productivity of their labourers. In these

very states, however, among farms not specialising in cotton, large units operated with wage labour had increased before the crisis. Now in cotton also the normal forces of competitive commodity production have begun to affect technique in the old South. Sharecroppers are giving place to a smaller number of workers on a wage basis.

These same forces which push the successful "dirt" farmer toward completely capitalist operation drive his less successful neighbours down into poverty. They make really desperate the plight of the small farmers. Increase in numbers of very poor small farmers is also characteristic of agriculture under capitalism. While industry was expanding this trend was somewhat blurred. In the industrial regions, farmers' sons and discouraged farmers themselves could find some other occupation. But with the slowing down of industrial expansion throughout the 1930's, and the development of chronic mass unemployment in the cities, the small farmers and the farmers' sons are backed up on the land.

So the large well-equipped farms, with their dominant rôle in commercial agriculture, and the extreme poverty of a great mass of small farmers are two essentially inter-related aspects of capitalist agriculture. In reviewing the story of *upward* development toward completely capitalist units of farm operation depending wholly on the exploitation of wage labour, we must not forget that this upward trend is only one side of the story. The plight of the smallest poor farmer who sells less than \$100 of product is no less truly a part of our capitalist system.

Farmers as Producers and Buyers of Commodities

When the wealthy Connecticut farmer of over a hundred years ago was importing his Chippendale sideboard, he had many poorer neighbours. In the very early days when land was abundant and commercial production was still secondary to home use, chance variations had played an important rôle in determining riches and poverty. The vigorous family having many industrious sons and owning a farm well-situated for soil and water could withstand crop failures and move up the ladder to prosperity. Families who were pursued by illhealth or were short of labour power within their own ranks, could not hold their own even on good land and drifted along in poverty. Differences were immensely sharpened as the balance of production shifted from home use to selling at a profit. Questions of cost and price, standardised quality and specialisation, equipment and expansion, credit and capital pressed upon the farmers. Chance variations still played some rôle. Accidents, illness, crop failure, death of an ablebodied son might push downward a family that owned a good farm. But the increased dependence on selling and buying gave primary place to cost, quality, equipment, and capital.

By 1929, seven-eighths of the gross farm income was drawn from sales and only one-eighth was made up of products used by the family on the farm which produced them. Farms selling less than 51° /o of their output are so unusual that they are classed separately as "selfsufficing" farms. (This term is misleading, as we have noted, since they must sell something in order to exist, unless they depend wholly on outside earnings.) These were only 8% of all farms and produced less than 2% of the gross farm income in 1929. Also exceptional are such farms as those Connecticut tobacco farms having 100% commercial output. But products for sale were over 95% of the gross farm income on the largest farms of every type. This was true also in several regions for certain types of farming, all income groups combined.*

Farms sell not only to non-farm consumers. They have developed an increased trade in farm products used in farm production. For example, in 1929 five dairy farms out of six bought at least part of their feed. All dairy farms as a group spent one-sixth of their gross income for purchased feed. Regions varied. In the North Atlantic states, where less than 5% of the dairy farms bought no feed at all, the total feed bill rose to 24% of the gross income for all dairy farms of this region. It was lowest (only 7% of gross income of dairy farms) in the western part of the dairy belt (Wisconsin and Minnesota) which is also a region with much corn and other grain.

Many grazing farms of the West buy hay from specialised hay farms. Most of their cattle are sold, in turn, to "animal-specialty" farms which fatten them for slaughter. Part of the seed used on crop farms is purchased, not only to supply deficits after a crop failure but

^{*} On stock ranches in the North Central, West South Central, Mountain and Pacific states. On cotton farms and animal-specialty farms in the Mountain states, And on grain, cotton, fruit, truck and crop-specialty farms in the Pacific states,

regularly for the sake of quality provided only by a specialised seed producer.

Insofar as farmers have shifted from horses to automobiles, motor trucks and tractors, they have become more dependent on equipment and fuel which they must purchase from industry. Fertiliser has become an increasingly important item in the older farming regions and on intensive crop farms. As a source of supply the barnyard has largely given place to great chemical manufacturing plants.

Every advance in farm equipment has raised the minimum of cash expenditures required for operating a commercial farm. Even apart from the four big items of wages, rent, interest and taxes, current expenditures for all farm production in 1929 were close to two billion dollars, while depreciation and replacements consumed over nine hundred million dollars.¹ Such necessary items among them consumed over one-fourth of the gross farm income.

Quite as important for farm operation are the other payments for rent, mortgage interest, taxes and bank credit. Such payments, always present, have been an increasing burden on farm income until in 1929 they added more than two billion dollars to the other necessary cash expenditures. For the upper two-fifth of the farmers, wage payments added still another billion of cash outlay.

More than half the gross farm income in the United States is consumed in cash payments necessary for carrying on farm production.

At the same time, products used by the family on the farm which raised them have become a minor item in the total requirements of the farm family. Both production and consumption on the farm are, in the main, dependent on buying and selling.

Commodities and money dominate the farm almost as completely as they dominate the rest of American life. The margin between costs and prices has become a basic element in the individual farmer's prosperity. Intelligent farming and vigorous health, the use of good land and the raising of abundant crops are no longer enough. The farmer must also be able to command money for improving his farm and its equipment. On the differences due to chance individual variations have been grafted a new type of differences based on cash resources, technical set-up, and the scale of farm operation.

Toward Larger Units of Production

Technical change in American agriculture was aimed originally at increasing the area which a farmer himself could cultivate. In industry, the introduction of machinery which changed the process had followed a long period of manufacturing-literally, making by handwith division of labour among groups of workers assembled side by side in a workshop. In agriculture proper (apart from the old household crafts) there had been no such developed division of labour. On the unspecialised farm, livestock required attention only at certain hours of the day and the crop work was fitted in between these hours. Crop work changes with the seasons and the growth of the crops, but highly developed division of labour in the field work required at any one time came only after other forces had increased the size of farm most efficient in operation. The area which one man or one family could cultivate continued as the prevailing unit of production while the general level of farm investment in equipment and land had risen.*

Improved machinery was increasing the productivity of the farmer's own labour and extending the acreage which he could manage with a minimum of help from his own family or from a hired worker. It was also making it necessary for him to increase his scale of production so as to get the utmost possible use from the more expensive equipment. On the farm that is too small to use a given piece of apparatus throughout the maximum seasonal period for which it is adapted, the burden of depreciation more than balances the saving of the farmer's labour. Farmers can never use machines regularly throughout the year and even with proper care farm machinery easily becomes obsolete before it is used up. It is imperative that they should get the maximum use of every machine they acquire and cut to a minimum the time during which it sits idle in the tool-shed.** Tractors are, of

^{*} This area varies greatly according to the type of farming and the quality of the soil. Also, with the aid of modern science and equipment, one man or one family may increase the volume of production without increasing the acreage they use.

^{}** Value is transferred to the product from any tool or item of equipment in proportion to the total units of product to which it is applied during the entire course of its use. As with the value freshly created by labor, the normal, social average of such use determines the quota of value transferred to each unit of product. Also,

course, adapted to many different uses, but increasing investment in other equipment and machinery drives the farmer toward specialisation. And all such equipment, including a tractor, compels him to raise his scale of operation in order to reduce the fraction of its depreciation which must be carried by each bushel of grain. Farmers who can accumulate and expand tend to crowd out the others.

Dairy farms in the North Atlantic states were fewer but considerably larger in output in 1930 than they had been thirty years earlier. A Montana study showed that where 14,000 wheat farmers operated in 1929, there were 35,000 wheat farmers from 1915 to 1917. But the 14,000 farmers were handling a larger total acreage than the 35,000 farmers had handled.² Specialised livestock farms in the United States had been reduced from 1,564,515 in 1900 to 716,559 in 1930. But their average value of product in 1929 was \$3,603 as against \$788 in 1899. Allowing for price changes, this means that average scale of operation had, roughly, doubled.

Technical development has been uneven. Western wheat farms in the 1860's and 1870's led in the general use of horse-drawn implements, partly because wage labour was scarce and the yield per acre was low. The farmer could make a good living only if he covered a wider crop acreage than was usual on eastern grain farms. Also western land was cheap—much of it was available for nothing. The settler could put a large share of his savings, or his borrowings, into farm equipment. This first revolution in farm technique not only increased the possible acreage of a well-equipped family farm but cut down the average cost of producing wheat. Fifty years later, the western wheat farmers led again in substituting tractors for horses, as the first tractors, heavy and unwieldy, were adapted only to very large level fields.

Row crops, requiring cultivation throughout the growing season, posed a more difficult technical problem. Only with the light-weight high-set "general purpose" tractor, successfully developed in 1924, was there evolved a substitute for horse or mule adapted to all types of

before a tractor, for example, is actually worn out with use, improvements in the manufacture of tractors may reduce the essential value of all tractors (that is, the labor time socially necessary for their production). Or tractors sold at the same price may have greater speed or power or they may be adapted to a greater number of uses and further increase the productivity of farmers who use the newer machines.

field work, and managed with ease on the smaller fields. Latest of all have been machines adapted to the most delicate processes of harvesting crops other than small grains and hay. Pea-pickers, for example, are now in general use on large truck farms. Machines for gathering potatoes have come into the market. (Digging potatoes has long been mechanised but gathering has remained a job for hand labor.) A machine for topping beets is said to have been perfected. The mechanical cotton-picker is still considered experimental in the United States.*

Within every given type of farming technical improvements have been made in some processes much sooner than in others. This fact has accentuated the seasonal peaks of necessary hand labour. On wheat farms, for example, ploughing, harrowing, sowing and cutting had been speeded from the pace of a man to the pace of a large horsedrawn tool while binding and stacking of the cut grain were still done by hand. To match the capacity of horse-drawn equipment family farms required a gang of wage workers for a brief time at harvest and later a gang to work with the steam thresher that toured the countryside. The horse-drawn reaper and binder which came into common use in the latter 19th century greatly reduced the volume of seasonal harvest labour. Then during the World War the harvesterthresher "combine" supplied the last link in the chain of grain machinery adapted to the farms of the semi-arid plains.** This gradually passed out of the experimental stage and has been widely used since the later 1920's. By 1938 there were 100,000 machines in use and about half the wheat acreage was combine-harvested, according to Department of Agriculture estimates.

Large gangs of harvest workers are no longer needed by the wellequipped family wheat farm. With combine and motor truck and full tractor equipment, a farmer with an extra man in the spring and two

* The sled which gathers cotton bolls along with leaves and stems has been widely used on large farms in Texas and Oklahoma. But this is not comparable with the true picker which draws the boll from the stem with a minimum of waste.

** Heavy combines drawn by large teams of 16 or 20 horses had been used in the Pacific Northwest in the 19th century. The prairie-type combine is a much lighter machine operated either by its own internal combustion engine or by power from the tractor which draws it. This combine has now been adapted to use in more humid regions by a windrower attachment which lays the cut grain evenly on the stubble for drying. After the grain is dry, the combine goes over the field again with another attachment that picks up the grain and feeds it into the combine.

extra men at harvest can now raise, harvest, thresh and deliver to the local elevator more than a thousand acres of wheat.

"Records from individual farms show that with horses it is possible for one man with some help at harvest time to handle 320 acres of crop land. With the old heavy-type tractor 700 acres per man could be handled; substituting a lighter modern 3-plough machine, 1,000 acres; and with a modern heavy-duty tractor of 30 draw-bar horsepower, 1,600 acres."²

Small grains have led the country in this mechanisation of every process from preparing the soil to harvesting and shipping the crop. And even here the use of seasonal labour has not been wholly eliminated.

Technical improvements have been pushing toward a larger scale of operation every farmer who can save or borrow for expansion. Other forces meanwhile have been driving in the same direction. Increasingly dependent on the returns from one specialised product or type of products, the farmer is compelled to standardise his quality and do his utmost to secure a market at fair prices. If his chief crop fails, or the price drops sharply, he faces heavy loss for his year's operation.

High quality of product involves not only standardised seeds or high-bred livestock. For crop farmers it means close attention to details of cultivation and the best scientific technique for fighting pests. In the care of livestock, balanced feeding and hygienic quarters are essential. All this adds to the labour and equipment required. And just as the well-equipped family farm can underbid its backward neighbours, so now the largest farms, with a developed division of labour, can clear a profit at prices so low that they leave the "dirt" farmer gasping. We take up this point again in Chapter VII.

Large producers can commonly command a better price than small producers. So in North Dakota, when the State Industrial Commission sponsored a wheat-buying program in 1938, it was announced that the state-owned mill and elevator at Grand Forks would pay a basic price of 65 cents a bushel for carload lots of a certain grade and 60 cents a bushel for less than carload lots of the very same grade.³ Many of the large farmers who are full-fledged capitalists have developed a special connexion with the market which gives them a greater certainty of returns than their competitors can achieve. Details differ in the various types of farming. In wheat, cotton, and livestock, for example, some of the largest growers and stock raisers are also traders. In truck farming, sheer volume of product gives an assured position. Citrus "co-operatives" are dominated by the corporation farms and other big capitalist growers.

Largest capitalist farms, it is true, are small concerns compared with the giant plants in industry. Less than 25,000 farms reported gross income of \$20,000 or more in 1929, and very few touched the milliondollar mark.⁴ For certain factors tend to keep the largest farm units considerably smaller than the units of industrial production.

In agriculture, for example, land has contributed to the productive process, instead of serving merely as a site for factory building or a right of way for transportation. The quality of available adjacent acreage and the terms under which it can be used are primary factors. Even with the application of most modern technique-chemical, biological and mechanical-the amount of capital which can be utilised on a given acreage is limited. It varies with the type of farming, but at each successive level of development there remains a limit to the value per acre that can be transferred to the product from labour, materials and equipment. Or assuming that additional acreage can be acquired so that the boundaries of a farm can be indefinitely extended, problems of efficient operation are complicated by the increasing distances. Limits of area for a single operating unit have been greatly extended by the use of motor truck and tractor. But still the limits of size-as measured by capital that can be utilised and output that can be produced in a single operating unit-remain as yet much narrower for farm than for factory. These limits will, of course, be further extended by future technical developments.

Such facts do not change the underlying principles of agricultural development. In every type of farming, hundreds, even thousands of large farms, operating successfully, are well over on the completely capitalist side beyond the line separating the working "middle" farmer from the large employer. Besides, as we have said, the shift from family hand labour to mechanical power and a developed division of labour in agriculture was retarded by the relatively late technical development in farming operations. And the end of such changes in farming method is not yet in sight. Large farms will grow larger.

And large farms will continue to produce an increasing share in the total commercial output. E. G. Nourse, now director of the Brookings Institution and one of the leading agricultural economists in the United States, stated in 1930 that "there is much to indicate that, even with the decentralised character of agricultural processes and the development of comparatively small power units adapted to farming, farms from four to possibly ten times the size of the family operating units to which we have been accustomed would make the best fit with the requirements of the new technique." ⁵

Increased Use of Wage Labour *

With increased productivity from improved equipment, the manhours of labour required per acre within any given type of farming have declined. But total *wage* labour on farms increased, up to the crisis of the 1930's. It reached a peak during the later 1920's, when the yearly averages of numbers employed ranged from 2,870,000 to over 3,000,000, and in the months of greatest employment the totals ran between 3,700,000 and 3,800,000.⁶ Taking agriculture as a whole, acreage expanded from 1900 to 1930 much more than the total labour force. Unpaid family labour declined; the number of farmers increased much less than total acreage; but wage labour on farms rose more than acreage.

PERCENTAGES OF INCREASE: 1900-1930

Total farm acreage	18
Improved farm acreage ^a	26
Number of farms	10
Total labour force ^b	7
Number of wage workers °	35

^a Comparing "improved" acreage of 1900 census with "crop land" plus "ploughable pasture" of 1930 census.

^bIncluding farmers, unpaid family labour and wage workers, with estimated adjustment for trends in distribution by age and by sex by Brookings Institution, in *America's Capacity to Produce*, p. 503.

° Ibid, p. 502.

* Conditions of farm workers are discussed in Chapter VI.

This increase in wage labour employed left it very unevenly distributed. In 1909, the first year for which the census gives us data on numbers of farms employing any hired help, these employing farms were already less than half (45.9%) of all farms in the country. Twenty years later, employing farms were fewer by nearly 300,000 and, in spite of a slight drop in total number of farms, those using wage labour were only 41.8% of all farms. During the same period, the average man-months of hired labour per employing farm had risen by about 15%. This general trend, with more wage labour on fewer farms, appears within almost every region of the country.

FARMS EMPLOYING WAGE WORKERS

	Number	Per cent of all farms	Average man-months of hired labour per employing farm °
1909	2, 922 ,2 79	45.9	11.8
1919	2, 888,999	44.8	11.6
19 2 9	2, 631,601	41.8	13.6
1935	1,500,000 *	22.I ^b	19.7

^a Estimate by Witt Bowden, Monthly Labour Review, June, 1939, p. 1248.

^b Derived from Bowden estimate and census total of all farms.

^o Derived from estimates of monthly average employment in report on Trends in Employment in Agriculture, 1909-1936, by National Research Project of U. S. Works Progress Administration.

After 1929, the number of employing farms dropped sharply. Census figures are lacking for exact comparison, but it is estimated that in 1935 less than 1,500,000 farms hired some wage labour.7 During the same years the estimated average number of all hired workers on farms had declined by less than 550,000 (that is, from 2,988,000 in 1929 to 2,468,000 in 1935).8 So the average volume of wage labour per employing farm had actually increased by 45%. The crisis reduced the numbers of medium-sized farms employing a little wage labour and increased the relative importance of fully developed capitalist producers.

During the thirty years that preceded the crisis, wage labour had increased most markedly in certain types of farming, especially cotton in the new regions of the Southwest, tobacco outside of the sharecropping South, truck, potatoes, fruit, and sugar beets. Wage labour

declined on the cotton farms of the Southeast with the increase in sharecropping. On livestock farms and dairy farms, less wage labour *per acre* was employed in 1929 than thirty years earlier. But these farms were larger on the average, and on livestock farms the wage labour *per farm* had increased.

Differences among the several types of farming are important. Human labour directly applied contributes a larger share of the value in the total farm output on intensive crop farms than on livestock farms, dairy farms, or wheat farms. (See data, Appendix K.) On intensive crop farms, therefore, the labour of the farmer himself becomes secondary to the labour of hired workers at a relatively low gross income level. As the number of wage workers increases, the "farmer" becomes so absorbed in managing them that he steps over the line to completely capitalist operation. So the line between what we might call "upper middle" and completely capitalist farms lies at a lower gross income level on the intensive crop farms than in any other type of farming.

Just as the scale of operation at which the upper middle farmer becomes a completely capitalist farmer varies from one type of farming to another, so also there are corresponding variations in the gross income level which can be achieved without any wage labour. In types of farming where direct human labour is still of primary importance, wage workers are employed in lower gross income groups than in livestock and dairy farming, or on the cash-grain farms which have a relatively large investment in machinery.

So in specialised fruit growing many farms with less than \$1,000 gross income (1929) were employing some wage labour. In truck and cotton, and on crop-specialty farms (most of which require intensive cultivation) the dividing line between those employing and those not employing wage labour fell in the group having more than \$1,000 but less than \$1,500 gross income. But among livestock and dairy farms and specialised grain farms this dividing line came in the next higher gross income group, with more than \$1,500 but less than \$2,500 in 1929.

On six types of specialised commercial farms, developed outside of the sharecropping system, the small farms employing no wage labour

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whatever produced in 1929 considerably less than one-fifth of the total output in their respective types of farming. Such farms are still numerous but their share in the total commercial production is slight. This is especially marked in the three types of farming—truck, fruit and stock ranches—in which large-scale units have been most highly developed.

In cotton, on the other hand, the three-quarters of a million sharecroppers, classified as "farmers," pull the share of non-employing "farmers" up to around 45% of the total output. In crop-specialty

DISTRIBUTION OF FARMS AND GROSS INCOME AMONG LARGE FARMS, OTHER FARMS EMPLOYING LABOUR, AND FARMS NOT EMPLOYING LABOUR: 1929

(FIGURES IN ITALICS		\$20,000 01	r \$6,000 to	Others	Not
ARE AUTHOR'S ESTIMATES.)9	more	\$19,999	employ-	employ.
	•	gross	gross	ing	ing
Type of farm	Total	income	income	labour	labour
Fruit (A)					
Farms	141,417	2.0	10.2	63.3	24.5
Product (million)	\$474.3	24	28	45	3
Stock (C)		· ·		12	2
Farms	71,000	6.9	19.3	35.5	38.3
Product (million)	\$509.4	48	29	17	6
Truck (B)			-		
Farms	84,561	1.5	6.8	50.2	41.4
Product (million)	\$243.6	26	22	42	10
Cash-grain (C)				•	
Farms	454,726	0.4	7.9	57.1	34.6
Product (million)	\$1,338.3	5	21	62	12
Animal-specialty (C)					
Farms	479,042	I.2	II.I	52.8	34.9
Product (million)	\$1,741.0	16	25	46	13
Dairy (C)					-
Farms	604,837	0.4	6.0	53.5	40.1
Product (million)	\$1,672.1	5	18	59	18
Crop-specialty (B)					
Farms	431,379	0.4	4.2	40.7	54.6
Product (million)	\$834.4	9	18	52	21

FARMS EMPLOYING LA	BOUR, AND F. (Con	ARMS NOT I	EMPLOYIN	G LABOUR	: 1929
(FIGURES IN ITALICS	·	\$20,000 or	\$6.000 to	Others	Not
ARE AUTHORS'S ESTIMATE	s.) ⁹	more	\$19,999	employ-	employ-
	·	gross	gross	ing	ing
Type of farm	Total	income	income	labour	labour
Poultry (C)					
Farms	166,517	0.3	4.1	36.1	59.5
Product (million)	\$331.2	5	16	53	26
General (B)					
Farms	1,044,264	Ъ	0.9	46.4	52.6
Product (million)	\$1,545.0	0	5	67	28
Abnormal and unclassif	ied (A)		-		
Farms	672,861	0.4	1.1	19.6	79.0
Product (million)	\$635.0°	27	I 2	32	29
Cotton (B)					
Farms	1,64 0,025	0.1	о.б	27.6	71.7
Product (million)	\$1.698.1	2	5	48	45
Self-sufficing (A)					
Farms	498,019			19.5	80.5
Product (million)	\$211.7			38	62
Total, all types					
Farms	6,288,648	0.4	3.4	38.1	58.1
Product (million)	\$11,234.2	10	16	51	23

DISTRIBUTION OF FARMS AND GROSS INCOME AMONG LARGE FARMS, OTHER

"Includes author's estimate of production by unclassified farms. (See Appendix D.) ^b Less than one-tenth of one per cent.

[°] Less than one per cent.

(A) Number not employing labour was smaller than number with gross income under \$1,000.

(B) Number not employing labour was larger than number with gross income under \$1,000, but smaller than number with gross income under \$1,500.

(C) Number not employing labour was larger than number with gross income under \$1,500, but smaller than number with gross income under \$2,500.

farms, also, sharecroppers on southern tobacco farms raise the percentage of non-employing "farmers" above the figure which would truly represent production by independent small farmers.

Even including sharecroppers (since we cannot estimate their share in the total output) and small part-time farmers and poor "self-

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sufficing" farms,* it is clear that in agriculture as a whole less than onefourth of the total output in 1929 was produced on farms employing no wage labour. Approximately half the total came from farms employing some wage labour but producing gross incomes under \$6,000 in 1929. More than one-fourth was produced by the capitalist and upper middle farms which had in 1929 over \$6,000 gross income.

ESTIMATED	PERCENTAGE	OF	TOTAL	OUTPU	T PRODU	CED	BY	FARMS	WITH
	\$6,000	OR	MORE	GROSS I	NCOME:	192	9		

Stock ranches	77
Fruit farms	52
Truck farms	<u>48</u>
Animal-specialty farms	41
Abnormal and unclassified farms	30
Crop-specialty farms	27
Cash-grain farms	26
Dairy farms	23
Poultry farms	21
Cotton farms	7
General farms	5
Self-sufficing farms	_
All types	26

We must emphasise again that all these figures based on individual farms understate the commercial importance of large units of operation. The giant Delta & Pine cotton plantation, for example, is here represented by 1,000 cropper farms and does not appear at all in the group with \$6,000 or more gross income. In the North, scattered "chain farms" owned by large absentee interests and tabulated as separate units are actually operated under close control by the owner's visiting experts. Such chains of middle farms represent one important phase of capitalist development in agriculture.

^{*} As we have stated above (page 78 of this chapter) "self-sufficing" is a misleading term, since these farms have to sell some product unless the family has income from some other occupation. They are, however, definitely less developed commercial farms than those which sell more than half their product.

More Horsepower and More Dollars in Farm Equipment

Greater use of farm equipment is another phase of capitalist development. This has proceeded more rapidly than the increase in wage labour. During the thirty years from 1900 to 1930, the volume of wage labour on farms increased about 35% but total units of horsepower on farms increased about 207%. This percentage refers to a combined total including work animals and any kind of mechanical power except automobiles.

The three decades were by no means uniform. The first ten years (1900 to 1910), during which the gasoline tractor was first placed on the market, saw the greatest increase in wage labour—greater than the increase in units of horsepower. The second ten years, including the World War, saw a slight decline in total wage labour on farms and a sharp stepping up in the rate of increase in power equipment. Then the 1920's brought a new high in both wage labour and power units, but the increase in total farm equipment far outstripped the slight increase in wage labour.

PERCENTAGE OF INCREASE IN TOTAL ACREAGE, WAGE LABOUR, AND FARM EQUIPMENT: 1900-1930

	Acreage	Wage labour *	Units of horsepower *
1900 to 1910	4.8	29.2 ^b	21.5
1910 to 1920	8.8	2.9 dec.°	34.3
1920 to 1930	3 .2	7·3 °	88.0
1900 to 1930	17.7	34.7	206.6

^a Based on years 1899, 1909, 1919, 1929.

^b Derived from census figures on total wage expenditures for farm labour, with allowance for the 41% increase in wage rates, according to Department of Agriculture weighted index, as given in *Crops and Markets*, July supplement, 1925, p. 217.

^c Derived from yearly averages of numbers employed as estimated by WPA, National Research Project, *Trends in Employment in Agriculture*, 1909-1936, p. 11.

^d Not including passenger automobiles on farms. See Power and Machinery in Agriculture, published April, 1933, as Miscellaneous Publication No. 157 of U. S. Department of Agriculture.

Horsepower units are not evenly distributed, whether by sections of the country, by type of farm, or by individual farms.

WHY FARMERS ARE POOR

Contrast is striking between the very low figures in the southern states and the very high figures in the grain states of the Northwest. In the following table the sections of the country are listed according to the average units of horsepower available per worker (including farmers, farm family workers, and wage labourers).

HORSEPOWER PER FARM WORKER: 1929

West North Central states	12.4	New England states	7.4
Mountain states	11.2	Delaware, Marvland & D. C.	7.0
Middle Atlantic states	10.3	West South Central states	12
East North Central states	10.1	Other South Atlantic states	4.2
Pacific states	9.0	East South Central states	т 8

^a Including farmers, farm family workers, and wage labourers. (For source, note ^d of previous table.)

Extremes among individual states are Montana and Kansas (with 22.5 and 20.1 respectively) and South Carolina with only 1.3 as an average for all farms, large and small.

With the increase in horsepower, which reflected increasing substitution of tractors for horses and mules, went also an increase in size and cost of field implements and the development of much new indoor equipment. In 1900, the draft animals on farms represented about three-fifths of the total investment in farm equipment other than buildings and productive livestock. Thirty years later this total investment had increased by 152% and draft animals represented less than one-third of the total.

REPORTED VALUE OF HORSE, MULES, IMPLEMENTS AND MACHINERY

Total	1900	1930	Increase
Horses and mules Implements and machinery Average per farm	\$1,093,768,000 749,776,000	\$1,348,647,000} 3,301,654,000}	152%
Horses and mules Implements and machin ery	\$ 191 131	\$ 214 525	12% 300%

Or taking the average per farm, which is more significant since the total number of farms had risen, we see that average investment in

horses and mules had increased only 12% while investment in implements and machinery had jumped by 300%.

Investment in farm machinery had increased more than the expenditures for farm labour. Highly mechanised "middle" farms were developing in the specialised grain, livestock and dairy production of the North and West and in the wheat areas of Texas and Oklahoma. But a definitely contrasting trend appears on fruit and vegetable farms and certain other intensive crop farms, including cotton in the Southwest. These were developing a high percentage of large-scale units employing much wage labour with an increasing but still relatively small investment in farm machinery. On cotton farms in the old South, sharecropping was being extended while wage labour declined and the increase in equipment lagged behind the average increase on other farms throughout the country.

It is natural that the relative importance of buildings, machinery, livestock, raw materials and wages should vary in the different types of farming. At one extreme are the stock ranches which have expanded primarily by acquiring great stretches of land and increasing their numbers of cattle or sheep. They have the smallest investment per acre in labour as in everything else, but they include so many acres that averages per farm are very high. At the other extreme are the fruit and truck farms which have expanded chiefly by a more and more intensive use of land. Acreage has increased as farms increase in size but most marked has been the increase per acre in numbers of wage workers and in the use of machinery and fertiliser. This is characteristic also of other intensive crop farms—such as tobacco, potatoes, sugar beets, etc.—but for these "crop-specialty" farms, the broad trend is obscured by the census which lumps them with hay farms in the mixed "crop-specialty" group.

Between these extremes are the grain, dairy and animal-specialty farms. These are far ahead of fruit and truck farms in average total investment in equipment and buildings, but they operate with more land and a smaller average investment per acre. They also employ less wage labour, both per farm and per acre, than the intensive crop farms. Poultry farming represents a still different combination, with a relatively large investment in buildings, equipment and livestock, and a marked dependence on purchased feed. Here the percentage of farms operating without wage labour is higher than in any other specialised type of farming except cotton; large-scale poultry farms are few and relatively unimportant in the total output. Except on the large farms little wage labour is employed.*

Small farmers of every type have fallen far behind in the general trend toward more expensive, more powerful equipment. But on this point only scattered data are available. For example, North Dakota led the country in 1930 in its percentage of farms (43.8%) having a tractor. In that year, North Dakota grain farms alone numbered 54,857, while only 34,148 farms of all types reported a tractor.** In Montana, the state whose farms led the country in average horsepower available per worker, only 36% of the farms reported a tractor; only 24.4% reported a stationary gas engine; and only 2.3% an electric motor for farm work.

"Self-sufficing" farmers *** region by region and in the United States as a whole have a smaller average investment in implements and machinery than any other type of farm. Next larger is the low average on cotton farms with \$170 per farm, taking all cotton regions together. But sharecroppers (mainly working on cotton farms in the South, east of Texas and Oklahoma) used on the average only \$69

* See Appendix F for certain exact data on these points for farms of different types. How these changes have affected the productivity of farm labour has been indicated in Chapter II, p. 27.

** Census of 1930 showed following percentages of farms reporting:

	Motor truck	Tractor	Automobile
United States	13.4	13.5	58.0
New England	26.7	10.5	60.5
Middle Atlantic	30.7	21.5	71.1
East North Central	19.6	24.7	79.7
West North Central	15.7	26.5	82.8
Mountain	21.8	17.9	67.7
Pacific	23.8	20.8	75.1
South Atlantic	8.3	4.2	42.1
East South Central	4.1	2.1	30.2
West South Central	8.4	5.7	45.6

For every farm with a motor truck there were at least four farms with an automobile, which for a farm without a motor truck usually serves as a work car. But 42% of all farms in the country had no automobile in 1930. Even in the then "prosperous" farm states of the Middle West and the Far West the carless farms were from 8% (in Nebraska) to 30% of all.

*** See footnote on p. 90.

worth of farm tools in 1930, as against an average of \$117 on all cotton farms in this region. Unfortunately the data on implements of parttime farmers (with less than \$750 of gross farm income in 1929) cannot be separated from the data for the other "abnormal" farms, most of which are highly capitalist units. In general, the census of 1930 does not report farm equipment in relation to farm income groupings.

Measuring Capitalist Development

Does this general increase in farm equipment serve as an index of capitalist development within agriculture? It is a trend which appeared only after industry* was clearly established on a capitalist basis. It accompanied the growth of commercial farming in a capitalist society and was one of the factors setting the farmer off as distinct from the feudal peasant. But among the great mass of working farmers their increased investment in farm equipment is not the primary index of development toward completely capitalist farming. It is secondary to the increase in wage labour on farms.

In industry based wholly on wage labour, capitalist development has involved a great increase of capital invested in buildings, machinery and materials with a much slighter increase of capital invested in wage labour. We call the first kind of investment (in buildings, machinery, materials) constant capital and the second kind of investment (in wages) variable capital. For wages buy the labour power of the worker whose labour produces surplus value. As the sum of constant capital increases and the *relative* sum of variable capital declines, we say that the trend is toward a higher organic composition of capital.

But agriculture as a whole is not yet dependent primarily on wage labour. Only about two farms out of five employed any hired labour in 1929. And only on the large-scale capitalist farms at the top is the work done wholly by hired labourers. Here, as in non-farm industry, the buildings, equipment, and livestock have taken on completely the form of capital. On other farms, where the farmer himself does productive labour, capital in the fullest sense of the word is also beginning to be formed. But we cannot correctly speak of farm equipment as "capital" insofar as it is operated by the labour of the man who owns

* See footnote on p. 19.

it. It becomes capital only as it serves in the process of extracting surplus value from a wage worker.

American agriculture is completely part of the capitalist economy. All the farms are participating in capitalist production. But these farms as separate units represent in their own internal organisation at least four distinct stages of economic development: the fully capitalist farms worked wholly by wage labour; the semi-capitalist farms where farmer and wage labourer are both engaged in productive work; and, less developed, the small commercial and small "self-sufficing"* farms operated without any wage labour whatever. Any attempt at measuring the relative degrees of capitalist development within the separate units of production—either by type of farming or by region of the country must approach the large fully capitalist farms and the middle semicapitalist farms with two distinct and separate standards of measurement.

Complete dependence on wage labour is the basic characteristic of the fully capitalist farms. On semi-capitalist farms the extent to which wage labour is used is the basic factor in development toward completely captialist operation. And the ratio of wage labour to labour by the farmer and unpaid members of his family would serve as index of this development.**

Improved equipment, of course, serves at every level of operation to make farm labour more productive. Whether operated by the owner or by a hired worker, it can cut unit costs and become an important factor in accumulation. And hope of making profits and accumulating for expansion has been the driving force in the middle farmer's operations no less than on the completely capitalist farms. Insofar as increasing investment in farm machinery, livestock and buildings, and increasing expenditures for seeds, fertiliser and feed serve to increase the middle farmer's possibilities of accumulation they help to pull him along the road toward completely capitalist operation. But as an index to capitalist development among the broad mass of farm producers who are themselves at work in the fields, such increased investment

* See above, footnote on p. 90.

** Lenin emphasised in his discussion of American agriculture that the volume of hired labour is the most direct indicator of the development of capitalist operation within agriculture. Lenin, *Selected Works*, vol. XII, especially pages 205, 212, 221, 241, 281, 284.

is secondary to increased employment of wage labour. For it is wage labour and not equipment which marks farmers' transition from simple commodity producers, who neither buy nor sell labour power, toward full-fledged capitalists depending wholly on wage labour.

Once the stage of completely capitalist operation has been reached, and farm equipment has become capital in the fullest sense of the word, our index of further capitalist development shifts to a different basis. The farmer's own labour is no longer an element in production. Now the volume of wage labour must be compared with the volume of farm equipment. As in industry, development on completely capitalist farms is measured by an increase of constant capital (buildings, equipment, livestock, materials) and a relative decline in the variable capital (wages).

Taking the several divisions of the country, each one as a whole without regard to types of farming or gross income groupings, we have the following picture of the relative extent of wage labour on farms in 1929. According to their employment of wage labour, Pacific states, New England, Mountain and Middle Atlantic states lead in general capitalist development. North Central states stand midway between these four divisions and the three divisions of the South.

	Farms employing wage labour			
	Wages paid	Per cent	Average days	
	(average, all farms)	of all	per farm	
California	\$959	66.7	405	
Other Pacific	376	57.6	202	
New England	399	59.1	222	
Mountain	356	54.8	236	
Middle Atlantic	265	55.4	181	
West North Central	161	54.3	126	
East North Central	137	46.4	135	
West South Central	100	35.8	148	
South Atlantic	87	34.7	156	
East South Central	32	23.5	94	

In average investment per farm, the nine sections of the country fall into a somewhat different order. The following table lists them according to their average investment in work buildings and farm

WHY FARMERS ARE POOR

implements and machinery. Pacific states which lead in employment of wage labour drop to the fifth place. And Middle Atlantic states, which are fourth in wage labour, lead the country in average farm equipment.

AVERAGE "CAPITAL" PER FARM: 1929-1930

	Farm equip- ment ^b	Live- stock	Fer- tiliser and feed	Wages	Total except land	Land
Middle Atlantic	\$3,169	\$1,238	\$517	\$265	\$5,189	\$2,586
West North Central	2,681	1,686	197	161	4,725	10,464
New England	2,609	1,090	663	399	4,761	3,530
East North Central	2,348	1,187	182	137	3,854	6,383
Pacific	2,265	1,673	468	678	5,084	15,613
Mountain	1,766	2,623	197	356	4,942	8,446
West South Central	676	679	82	100	1,537	4,365
South Atlantic	653	399	173	87	1,312	2,436
East South Central	449	383	78	32	94 2	1,765
United States	1,559	998	189	152	2,882	5,554

• Figures are not complete, for the census includes no report on such expenditures as seeds, sprays, containers, ginning, contract threshing, veterinary service, horeshoeing, and minor supplies.

"Work buildings, implements, and machinery.

When livestock and all other items are included, Pacific and Mountain states climb to second and third places. (See fifth column of figures in table.) And the grand total per farm, including land, gives a still different order:

AVERAGE TOTAL	'CAPITAL"	PER	FARM,	INCLUDING LAND: 1929-1	930
Pacific West North Central Mountain East North Central Middle Atlantic	\$20,697 15,189 13,388 10,237 8,775			New England West South Central South Atlantic East South Central	\$8,291 5,902 3,748 2,707

But, we repeat, the leadership of the Pacific states (and especially California) in capitalist development of agriculture rests not on the

high land "values," or large investments in livestock and feed or other constant capital, but on their high percentage of farms employing wage labour and the high average volume of wage labour on the employing farms. For other sections of the country, also, their relative position in regard to wage labour is more decisive as a measure of capitalist development than their relative investment in farm equipment and in land. Farms in the North Central states of extensive wheat and livestock farms are less capitalistically developed than farms in the New England and Middle Atlantic states.

Factors in Accumulation

What are the decisive factors in the individual farmer's possibilities of accumulating wealth? From this angle, what are the relative contributions of wage labour and technically efficient equipment?

Value transferred from buildings, implements, livestock, feed and fertiliser is an important part of the gross value of the farmer's product. But in using his equipment and raw materials the farmer merely incorporates into his product value which he has previously purchased or borrowed or which he has created by his own labour, or taken from wage workers, in past years. The only new value created during the current year is that produced by the farmer and his family, plus the value created by wage workers. The larger the rôle of hand labour, the larger is the share of newly created value. The greater the number of wage workers, the greater also is the volume of surplus value appropriated by the farmer.

But the fact that his product includes a relatively large amount of newly created value does not benefit a farmer unless this value can be fully realised on the market. Even the considerable surplus value taken by the full-fledged capitalist farmer from his wage workers does not give him an extra margin for accumulation, unless the surplus value can be transformed into money. Whether value can be realised (that is, transformed into money) depends on a great many different conditions, including the general state of the market for the particular commodity and the relation of the individual farmer to the marketing outlets. But for the moment we assume that all the farmers can reach a free competitive market and that the total gross return from all farm commodities is moving in rough relation to their total value.

Every farmer knows that as an individual producer he is powerless to set a price based solely on his own reckoning of what *his* products are worth. And when he ponders the subject of prices, he thinks in terms of his cost of production and seldom goes back to the underlying question of value. As a practical business man he is right to put his attention on costs and let the economists worry about value. For while the total value (taking production as a whole) is roughly equivalent to the total price of all products combined, the value embodied in each individual unit of product is almost never equal to the price, or even roughly equivalent to it. And this is not due simply to the ups and downs of market demand or to deliberate pressure by monopolists. It is related to the profit system which dominates farm production no less than it dominates the complexities of big industry.

Under the profit system prices actually prevailing in a freely competitive market fluctuate above and below a point which approximates the average cost of production of the given commodity plus the average rate of profit current in the business world. The producer whose costs are less than the average receives a higher than average rate of profit on his investment. The producer whose costs are relatively high receives a less than the average rate of profit. The extra labour incorporated in his product, or the abnormally high transfer of value from his producing equipment, cannot be covered by the price which is always related to average costs.

This general principle is modified for farmers by variations in natural quality of soil, in water supply, and in location. Insofar as these differences are inescapable, and the products of the least favourable farm land are required for meeting effective market demand, prices of such products in a freely competitive market would be high enough to cover costs of operating with average equipment on the *worst* farm and not on the average farm. Prices would represent not the actual costs on the worst farm with the most backward equipment, but costs which would result from the combination of worst natural conditions and average technical advantages. In a freely competitive market, therefore, prices of farm products are a compound of two factors. The factor of equipment pulls the price toward average current costs. The factor of land tends to push the price up to cover costs on the worst farm.

Prices resulting from these two factors would yield for agriculture as a whole an average rate of profit on total farm investment apart from land, plus a margin for rent which varies with the quality of the farmer's land. The question of rent is discussed in the next chapter. Here we are concerned with analysing the trend of costs and profits apart from rent.

For the individual farmer at any one time, the primary factor in the possibility of accumulating for expansion is the relation between current prices and his individual costs. Technically efficient equipment increases the productivity of the farmer's labour. When used to its maximum capacity the cost of its depreciation is more than balanced by the decline in direct labour cost per unit of output. Insofar as it actually displaces labour formerly employed, this reduction of cost is most marked.

But this is only one side of the story. For as the advanced equipment comes into more general use, it pulls down the average cost of production. Losses of backward, high-cost farms become more serious, and the "progressive" farmers who count on an extra margin between their low costs and the average prices drive for still further improvements.

This quest for lower costs and for higher margins between cost and price goes on season after season and year after year. And as it proceeds it introduces, in the long run, a counter-trend that threatens a general decline in the average rate of profit. To understand this we must leave for the moment the question of prices and costs and return to the underlying question of value. For without an understanding of the underlying factors in value and price and profit, we cannot find our way through the complex elements in the farm crisis. This results from forces deeply rooted in the profit system. The present section attempts merely to sketch the indispensable background for our later analysis of the crisis itself.

As the technique of production has changed and the rôle of direct human labour has declined, relatively more of the value in each commodity is transferred from the machinery and equipment (in which other human labour has been previously embodied) and relatively less of the value is newly created in the production of each particular item in the whole vast catalogue of products. The ratio of total value newly created to total value transferred declines sharply in our productive system as a whole.

Part of the newly created value is required for the maintenance of those who do productive labour. In industry this goes to workers and technicians as wages and salaries. In agriculture, where most of the productive labour is done by working farmers and their families, this maintenance part of newly created value is divided between wages to hired farm labour and a living for the working farmers and their families who are self-employed. But both in industry and in agriculture the newly created value includes a surplus beyond that which is required to keep the producers alive and able to continue their work. When producers are wage workers this surplus value is appropriated by their employers. It is the difference between the total value newly created by the workers' labour and the maintenance value of their labour power which the employer returns to them in the form of wages. Surplus produced by self-employed working farmers supposedly belongs to the producers themselves, but much of it is taken from them as rent and interest and other payments to outside capitalists.

Surplus value taken from wage workers in agriculture and in industry and surplus produced by working farmers and the few others engaged in individual production together provide the total profit that can be drawn from our economic system. It is distributed among the members of the capitalist class through a complex financial mechanism. This total profit is much broader and more inclusive than the capitalist's idea of profits. It is the one great reservoir from which can be drawn capitalist income of every kind and any genuine increase in total capital.

So taking our economic system as a whole, the relation of this total surplus value (including the surplus produced by working farmers) to the total investment of capital is a decisive factor. With every increase in total investment (machinery and buildings plus wages and farmers' living) the broad average rate of profit must decline unless the amount of newly created product which can be held as surplus increases in proportion to the total investment. (We are speaking now

of long-time underlying trends which were recognised long before the great economic crisis of the 1930's.)

In production based on wage labour, such an increase in surplus could be accomplished only with enormously greater exploitation of the workers. For obviously, as the ratio of newly created value to value embodied in productive apparatus has steadily declined, the ratio of *surplus* value to total capital must also decline unless a greatly increased portion of the newly created value is appropriated by the capitalist. The drive for such increased appropriation by the capitalist, largely through greater intensity of labour together with a lowering of real wages, has met with more and more determined resistance by the organised workers. It is the economic basis for the sharpening of class struggles. But all the anti-labour efforts by the employers have not succeeded in reversing the long-time downward trend in the average rate of profit.

Agriculture is operated with a relatively high ratio of newly created value in relation to total investment apart from land.* And in agriculture much of the surplus product remains in the hands of working farmers who produce it, subject only to toll drawn off as rent, interest, taxes, and high monopoly prices for essential supplies. But here there exists the same underlying relation between total surplus product and total investment. Both the completely capitalist farmers and the "middle" farmers have operated with a rising volume of farm equipment (which means more value transferred from equipment to product) and a *relatively* declining volume of newly created value. Here as in industry the total surplus has increased less rapidly than the total investment for which this surplus was the sole source of profit. As in industry, the rate of profit has tended to decline. So we have witnessed increasing exploitation of wage workers on capitalist farms, and increasing financial difficulties for the middle farmers.

Farmers cannot escape the conflicts and difficulties inherent in the capitalist system. In order to survive as commercial producers they are driven to cutting costs through technical improvements. As these be-

^{*} Investment in land is excluded because land in itself has a price but no value, and no value is transferred from land as such to the product. Exchange value of the product (as distinct from its use value) is created by the new labour embodied in it and by the transfer to it of value previously created by labour. We return in the next chapter to questions of rent and investment in land as distinct from genuine capital.

come general, they lower the average price of the product. And the increased investment in equipment which has given temporary advantage to the most advanced producers in the end creates new problems by lowering the average rate of profit.

In general, the larger the individual farmer's scale of operation the greater his possibilities of accumulation. As we have shown, the large farmer will tend to have a higher rate of profit than the small farmer, i.e., his rate of profit will be above, and the small farmer's will be below, the average rate of profit. Also, the large farmer's higher *rate* of profit is on the whole less important than his greater *volume* of profit. Taking the broad averages, farmers' profits have been little more than enough to provide a family living. Even before the economic crisis of 1929–32, average net farm income left a very small margin after allowing a fair return for the farmer's own labour. Only the larger operators—on whatever basis—can hope to clear enough to cover living expenses and buy new equipment without borrowing or making deferred payments.*

Farmers even more than other business men become heavily dependent on credit not merely for expansion but for everyday operation. Farmers raising crops for sale receive their returns only once a year. Some in the warmer sections may produce two crops a year, but beyond that they cannot speed up the cycle of production which is fixed by natural conditions. They cannot raise the annual rate of return on such capital as they invest in seeds, fertiliser, wages and supplies by turning it over several times a year. Most farmers have had to borrow a relatively large amount not only for expansion but for current costs. Such dependence upon credit became increasingly serious with the increased need for expensive equipment and the increased use of purchased commodities both in farm production and in farm living.

We are speaking now of the regular course of farm business in nor-

^{* &}quot;The ratio of cash expenses to cash income is higher on small farms than on large ones, indicating that small farms have less possibility of high returns than large farms." (University of Nebraska, College of Agriculture, Experiment Station Bulletin 308, "The Relation of Size of Farm to Tax, Labor, Improvement and Other Farm Expenses in Nebraska," 1937.)

[&]quot;The possession of a certain abundance is necessary to an individual to exercise provident foresight." (W. C. Lowdermilk of U. S. Soil Conservation Service in *Journal* of Farm Economics, February, 1937, p. 44.)
mal years. But in addition, the farmer has had two difficulties peculiar to his occupation. First, weather and pests directly affect the size of his crops, the quality of his pasture, the price of feed for his livestock. Until the New Deal set up federal crop insurance for wheat all farmers operated without any form of public insurance to cover the losses which come and throw out all their reckonings. Second, as we have already pointed out, most of the farmers' products are peculiarly subject to sudden shifts in marketing conditions, which include unpredictable and extreme variations in price.

Quality and price of land also directly affect the individual farmer's possibilities of accumulating and expanding. Good land increases the productivity of his labour. But the farmer whose labour is exceptionally productive because he has favourable natural conditions of soil, lay of land, and location may or may not be able to keep for himself the added profit that these advantages make it possible for him to produce. In our capitalist world, such natural advantages are reflected in the rent which is exacted by an absentee owner and in the price which a farmer-owner must pay for title to land. If the farmer is a tenant, the benefit of his exceptionally productive land is paid over to the landlord. Only if he is an owner, does the surplus output add to his own income. And even as an owner he receives it *after* he has established title by paying the higher price per acre which his good land could bring.

In the early years, as the frontier of settlement was moving westward, such natural differences in productivity played an important rôle in accumulation. So long as free land was available, this fact held down the price of land—very definitely in the region still open to settlement and indirectly also to a less degree in the older farming states. Rent (which is the basis of land price) was slow in forming. Lucky homesteaders who had drawn the better farms could pocket the benefits of their more productive labour. This was a passing phase which could not survive the closing of the frontier of free settlement. By the 1890's the advantages of production on the better lands were completely incorporated in the prices paid by new owners who bought the better farms or they were taken by the landlord from his farm tenants.

Since the 1890's basic land prices have changed more in some regions

than in others under the effect of speculation, shifts in farming areas, and changes in the relative importance of various types of farming within each region. Taking the farmers' investment as a whole, there has been a marked shift from land ownership to farm equipment. Such increases as are shown in average "capital" values per farm reflect only in part genuine accumulation by individual farmers. Far more do they reflect the farmers' increased dependence on borrowed capital and rented land. (Rent, land tenure and mortgages are more fully discussed in Chapter V.)

Last but by no means least important factor in accumulation is the broad general fact that farmers as a class have been exploited by the monopoly forces in banking and industry. These operate against the farmers at every turn. Most conspicuous are the high freight rates and the tightly controlled prices of farm implements and farm machinery. But this is only part of the monopoly extortion that eats into the farmer's income. He has always paid high prices for building materials, chemical fertiliser, and miscellaneous items needed in farm production. He has paid higher interest rates than city business men must pay. He has always been subject to varying degrees of monopoly pressure from processors and traders through whom the farm products reach the ultimate consumer. This old conflict between farmers and the more developed sections of our capitalist economy has definitely reduced the possibilities of accumulation by agricultural producers and increased the profits and wealth of finance capitalists.

Capital Brought in from Other Sources

While farmers face enormous difficulties and agriculture has been the poorest section of our capitalist economy, much wealth has been drawn indirectly from the exploitation of the farmers. But this is not the whole story. For some non-farm capitalists, functioning in the world of monopoly and finance capital, have also entered agricultural production directly and have found great profit in large-scale capitalist farming. Most conspicuously in California such men provide the basis for a strong community of interest between the large-scale capitalist "farmers" and the banking, utility, railroad, and canning corporations.

For example, the Giannini banking chain (heading up in the Trans-

america Corp. and the Bank of America N.T. & S.A. in San Francisco) through its California Lands, Inc., operates or supervises farms totalling some half million acres. And two younger members of the Fleishhacker family, which dominates the Anglo California National Bank and plays an important rôle in California business and politics, are leading spirits in California Delta Farms, Inc. This is a million-dollar corporation raising asparagus, sugar beets, corn, celery, onions and potatoes.

Tagus Ranch, called the world's largest peach, apricot and nectarine orchard, was developed by Hulett C. Merritt, one of the brothers who a generation ago sold to John D. Rockefeller their mineral land holdings in the Mesabi iron range. Although they complained loudly at the time over the "low" price at which they were forced to sell, this brother was able to retire to what a magazine writer calls Pasadena's Millionaire Row. But somewhat bored with idle riches, he used his fortune from iron lands to take up "farming."

Mr. Merritt was born on a farm in Ohio, but his early years on a farm had not given him the wherewithal to build irrigation works which cost \$300,000 and transformed 7,000 acres of dry grazing land into a perfectly equipped and extremely profitable farm raising a million dollars yearly output of fruit, cotton and hay. Now Tagus Ranch with its 700 families of wage workers, its irrigation engineer, its soil chemist, its superintendent and seven foremen and 35 straw bosses, supplies all the peaches, apricots and nectarines for seven canneries employing for part of the year six thousand workers.¹⁰

Capital for the far-famed Campbell wheat farm in Montana was provided during the World War by a corporation which included J. P. Morgan and other Wall Street men among its directors. This farm used chiefly rented acreage. Now Thomas D. Campbell, in partnership with John J. Raskob of duPont and General Motors, has gone into New Mexico to operate a "farm" of 286,000 acres which they have bought in Santa Fe County.¹¹

In cotton, the capital for the largest plantation in the country, if not the largest in the capitalist world, was subscribed by Manchester (England) cotton textile magnates who wanted to have a dependable supply of raw material. The corporation (Delta & Pine Land Co.) is still owned chiefly by British capitalists.¹² A new plantation, hailed as the third largest cotton plantation in the world, has been set up in eastern Arkansas by the Chapman-Dewey Lumber Co. of Memphis, on its 18,000 acres of former timberland.¹³

The giant King Ranch, occupying an entire Texas county larger than the state of Rhode Island, grew from an original venture which was no small affair. One Captain Richard King, a Mississippi River pilot, back in 1852 was able to buy 75,000 acres at five cents an acre. This Captain King and his heirs not only controlled the county and closed the trails which formerly cut across it, but they defied the builders of modern highways. Not until 1937 was the barbed-wire boundary cut to admit a ribbon of concrete and save the motorists a 50-mile detour.¹⁴

Some industrialists using farm products as important raw materials have found it profitable to own a source of supply,—large farm units operated with wage labour. Commonly, they buy also from other farmers who must accept prices based on the low costs of a large model farm operated by the company. (Such seems to be the function, for example, of the few farms owned and operated by the big milk distributors in the New York milkshed.) Or the big buyers of a specialised crop depend wholly on "independent" middle farmers. But here the farmer's independence is often bound by a contract with the processor who fixes the terms of sale and supervises the methods of cultivation.

On sugar-beet farms, the refinery commonly advances cash required for paying the farmer's hired workers. This may even be paid not to the farmer but directly to "his" workers who go to the refinery to collect their wages.

Credit for intensive crops is sometimes advanced by a fertiliser company which takes a stated quantity of the farmer's product at the end of the season. Or a commission trader makes advances with the understanding that he will have the disposal of the entire crop. On many of the farms which specialise in fattening cattle for slaughter, the livestock are purchased on credit through a livestock commission firm with the proviso that the same firm shall also handle the farmer's sale to the packer.

In all such contracts, the prices are fixed by the buyer, and usually no other outlet is available to the farmer. While he becomes entirely

subordinate to the processor or the commission trader who provides current operating capital, the farmer is still responsible for the farm itself and his tools and livestock. The farmer carries the basic risk of operating losses.

Farmers have also had, as we have already stated, a declining equity in the land they use. When times are good, they borrow for expansion. When times are bad, they borrow to keep going. Passing from tenancy to ownership, and clearing the mortgage if title to the farm has been achieved, have become increasingly difficult. Less than one-fourth of the farm value—land and buildings—remains in the hands of unmortgaged owners who operate no rented land.

While farmers were losing title to their land, the capital loaned to them on mortgage was increasingly supplied not by their more prosperous neighbours and other individual investors but by banks, mortgage loan companies, and insurance companies. Farmers' mortgage debt was not only increasing, it was bringing them more and more face to face with creditors who represent the most highly developed stage of finance capital. In 1928, less than one-third of the total mort-

FARM MORTGAGES HELD BY PRINCIPAL CLASSES OF LENDING AGENCIES: JANUARY I, 1928 °

Total mortgage debt [»]		\$9,468,000,000	
		100.0	
Retired farmers	10.б		
Active farmers	3.6		
Other individuals	15.4	29.6	
Insurance companies	22.9		
Mortgage companies	10.4		
Commercial banks	10.8	44 . I	
Federal land banks	12.1		
Joint stock land banks	7.0	19.1	
All other agencies		7.2	

^a For regional figures see Appendix G.

^b Including mortgages on rented farms and farms operated by salaried managers.

gage debt on farm land and buildings (including rented farms and farms operated by salaried managers) was held by individuals; 44% was held by commercial banks, mortgage companies and insurance companies; and 19% was held by public or semi-private lending agencies. Only 14% of the total mortgage debt represented capital borrowed from other farmers.

Lending by farmers to other farmers was relatively most important in the northern states between the Hudson and the Mississippi. The actual total of such loans was largest in the West North Central states, but here lending by individuals was entirely overshadowed by the loans from insurance companies and mortgage companies. Corporations lending on mortgage naturally slide into land ownership through foreclosures when farmers default on mortgage payments. From this has developed another form of direct exploitation of "middle" farmers by finance capital.

Most important are the "chain farms" of the big life insurance companies. Total farm real estate held by life insurance companies on January 1, 1938, was valued at \$705,207,000, according to the U. S. Bureau of Agricultural Economics.¹⁵ Insurance companies and three other leading groups of lending agencies together held about 28,000,000 acres of farm land, including about 125,000 farms. In spite of the decline in the foreclosure rate, since the lowest point of the crisis in 1932-33, the number of farms owned by the principal lending agencies continues to increase.¹⁶ Large as these figures are they still represent less than 2% of the farms and less than 3% of the farm land in the country as a whole. But in certain regions the situation is far more serious than this. So, in 1934, it was estimated that all creditor corporations and public lending agencies combined had taken over nearly 30% of the total value of farm land in the East North Central states.¹⁷

No other holdings are so large as those of the Metropolitan Life Insurance Company whose 7,300 foreclosed farms include 1,621,000 acres of improved land on which are living between 50,000 and 60,000 persons. This farming empire of the largest financial corporation in the United States has total acreage enough (improved and unimproved) "to make a mile-wide farm from New York to Los Angeles." Some of the other large owners of many farms were revealed in 1936 when the U.S. Senate published the names of all who owned at least 150 farms receiving benefits in 1934 under certain sections of the Agricultural Adjustment Act. The following list of the largest 17 owners is based on this Senate report.

FARMS OWNED BY INSURANCE COMPANIES, BANKS, ETC., AND RECEIVING BENEFITS UNDER CORN-HOG, COTTON AND TOBACCO SECTIONS OF THE AAA: 1934 ¹⁸

Number of farms Metropolitan Life Insurance Co. 4,585 John Hancock Mutual Life Insurance Co. 4,341 Mutual Benefit Life Insurance Co. 3,936 Prudential Insurance Co. of America 3,856 Travelers Insurance Co. 2,845 Northwestern Mutual Life Insurance Co. 2,496 Equitable Life Assurance Society 2,158 Aetna Life Insurance Co. 2,153 Union Central Life Insurance Co. 2,126 State of South Dakota Rural Credit Board 1,667 Equitable Life Insurance Co. of Iowa 1,539 Bankers Life Co. of Des Moines 1,135 Phoenix Mutual Life Insurance Co. 1,072 South Minneapolis Joint Stock Land Bank 1,068 Federal Land Bank of Omaha 1,030 Connecticut Mutual Life Insurance Co. 1,018 Connecticut General Life Insurance Co. 1,013

These figures understate the numbers of farms owned by the large insurance companies since they exclude farms not receiving benefits on corn-hog, cotton and tobacco production. Such understatement is very marked since insurance company interests in farm land have been especially important in the wheat regions of the Northwest. This list also understates the numbers of large multiple owners. For according to the same report there were eight other concerns (not named) receiving benefits under other sections of the AAA in 1934 and owning over 1,000 farms. In all, 70,400 farms were reported as held by these 25 large multiple owners.

The Metropolitan Life Insurance Company and others have set up a complete apparatus for supervising the operation of their farms. The

farmer may be the former owner, remaining as tenant, or he may be a newcomer accepted as tenant after the owner lost his title. The tenants are carefully selected, as the insurance company demands efficient development of the land. Naturally farms on which mortgages have just been defaulted are not in the best physical condition. In supplying capital to rebuild and to restore good soil conditions, the company requires high standards of farm operation. Thus to the general economic forces of commodity production which tend to sift out the middle farmers, allowing a few to enjoy prosperity and pushing many into poverty, are added the exacting standards of a hard-boiled business concern determined to get from the farmer a return on its investment. The Metropolitan claims to have a long waiting list of tenants hoping to get one of its farms. Those who know the actual workings of insurance chains are inclined to question this claim.

The Metropolitan also protests that it is operating farms only as a temporary expedient and has no desire to continue indefinitely its rôle of landlord and supervisor. Actually since the depth of the crisis it has taken possession of \$83,000,000 worth of farms of which it has re-sold less than one-fifth. According to the vice-president in charge of farm loans:

"We don't make a practice of taking losses, but we always stretch a point to restore a foreclosed farm to its original owner, charging cost price only for the improvements we have made. If the former owner is a tenant, the rent he pays is applied on the purchase price of the farm."¹⁹

In spite of such favourable terms (on paper), only 10% of these resold farms have been taken back by former owners or members of their families.²⁰

Farmers Doing Other Work

It is characteristic of capitalist development in agriculture that many well-to-do farmers have some connexions with other business and a much larger number of poor farmers supplement their earnings with wage labour. Among 1,116 large-scale farms (including chains) 27% of the owners—individuals and corporations—had their chief source of income from some non-farming occupation.²¹ Many poor farmers have been driven to seek wage work away from their own farms, and at the same time some industrial workers have clung to the land and tried to carry on small farms on the outskirts of industrial towns. Since the crisis of 1929-33, the number of very small farms and the number of farmers reporting some work away from their farms have increased.

On the whole question of work done by farmers away from their farms the census has given us certain totals, but it has failed to throw much-needed light on two points. Except in a small sample study it makes no distinction between wage work and business. And it gives only one small item on the relation between non-farm work and farm income. Of 1,902,898 farmers reporting work away from their farms in 1929, only 339,207 are classified by the census as "part-time" farmers, because they worked elsewhere at least 150 days and reported less than \$750 of gross farm income. But another 200,982 farmers with higher farm income also worked elsewhere at least 150 days, and 1,362,709 farmers worked more irregularly.

FARMERS REPORTING OTHER WORK, BY GROSS FARM INCOME: 1929

		Farmers working off their farms Days under			
Gross farm income	Total	150 days	150 or not		
	farmers	or more	reported		
Under \$750	2,324, 099	339,207 *	1,086,244		
\$750 to \$999	810,637	117,500	271,800		
\$1,000 and over	3,153,912	83,482	4,665		
Total	6,288,648 ª	540,189 °	1,362,709 °		

" Census figure. For regional estimates see Appendix H.

We have estimated roughly the farm income distribution of the part-time farmers who fall outside the limited census definition. We believe it is fair to state that in the North at least 85% and in the West about 90% of the farmers with less than \$1,000 gross income in 1929, did some other work away from their farms during that year; in the South, barely 45% of the farmers in this low income group did other work in 1929. Or taking the country as a whole perhaps 15% of the farmers in these low income groups worked elsewhere at least half the year (150 working days or more) and about 43% worked elsewhere less than 150 days. According to these estimates there were in 1929 about 1,320,000 with gross farm income below \$1,000 who existed solely from this most meagre farm return.

Five years later the total number and the percentage of farmers working off their farms had increased. This increase was most marked in the Great Plains states which had been hit not only by the sharp drop in wheat prices but by serious drought. But work reported for 1934 in the North and West was far more irregular than the work reported there for 1929. In the Northwest the increase probably reflected chiefly the employment of farmers on work relief projects. Partly offsetting the increased employment in the Great Plains was a marked decline in farmers' employment off their farms in six southern states: Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana.

Some indication of the type of work done off the farmer's own farm appeared in the census for the first time in the 1935 tabulations. Here we learn that over 80% of those farmers who reported the type of their other occupation in 1934 had done non-agricultural work. The percentage doing non-farm work was notably high in the North Atlantic states.

Effect of Crisis on Capitalist Development

In general the economic crisis of 1929-33 and the forces working toward some measure of recovery have intensified the existing trends in American agricultural development.

For a while, some farmers parked their tractors to save fuel costs and raised smaller crops with horses fed on home-grown hay and oats. A study by the National Bureau of Economic Research (their Bulletin 67) makes much of this and argues that the development of largescale farming will always be held back by recurring crises. But this view overlooks the vital distinction between the relatively assured position of the large capitalist farm and the slender margin of accumulation on the middle farm. It is certainly doubtful whether these two groups were equally inclined to park their tractors when the bottom dropped out of the wheat market.

More significant is the steady upturn in tractor sales reported by the

manufacturers as soon as federal benefits became available under the crop reduction plan. It is also noteworthy that tractor-drawn ploughs and tractor-drawn cultivators were a larger percentage of all ploughs and all cultivators sold in 1937 than they had been in 1929.²² Farms receiving electric current from central power stations increased from 709,449 in 1932 to 1,300,500 in 1938. This increase is the more remarkable when we consider that initial expenditures for electrification average \$210 according to estimates by the utilities.²³ Productivity of farm labour, which had been increasing steadily before the crisis, continued to increase, though at a somewhat slower pace. Average manhours required to produce a given quantity of six selected crops have been estimated by the WPA studies of re-employment opportunities and changes in industrial techniques. These studies show the following percentages by which the average manhours per unit of output were reduced after 1931:*

Corn	3%	Cotton	8%
Wheat	II	Potatoes	3
Oats	7	Sugar beets	I

A further distinction is important. Very low prices for farm products greatly reduce the possibilities of expansion by medium-sized farms. In this sense, and only in this sense, a crisis checks the trend toward wholly capitalist operation. But this is balanced by another factor. For while these very low prices also reduce profits on large capitalist farms they drive these farms toward further reduction in cost. Such reduction may involve further expansion and a still larger scale of operation. Medium-sized farms are pushed toward poverty while a larger share in total production comes from the capitalist group at the top.

This selective process which is constantly dividing the few moving upward from the great mass of middle and poor farmers exerts in time of crisis a tremendously increased pressure on this mass. No

*These estimates are concerned with actual averages for the country as a whole, except for potatoes which are based on selected areas in 8 states. The base years were 1927-31, except for sugar beets where they were 1928-32. These years are compared with 1932-36 for corn; 1933-36 for cotton and sugar beets; 1934-36 for wheat, oats and potatoes. The estimates include also comparisons with pre-war productivity. They are assembled by Bowden in *Three Decades of Farm Labor*, p. 35. broad statistical measure of changes actually occurring during the crisis will be at hand until the census provides fresh data, comparable with the data on farm income groups of 1929-30. But it is noteworthy that the changes between 1930 and 1935 increased the farms of very small acreage (3 to 19 acres) and of very large acreage (1,000 acres and over) more than any other groups. Class lines and the problems of the poor and middle farmers persist. In fact, they will be further sharpened as time goes on by the very fact that the doors of opportunity in industry have closed and no longer offer escape for bankrupt farmers and their sons and daughters.

The crisis years have increased the population that clings to the land, or even seeks a place on the land, hoping to exist less desperately than in cities with masses of jobless workers. We take up in later chapters the special problems of small farmers and the hopelessness of subsistence farming as a shelter from the economic storm.

Before the crisis of 1929-33, small farmers were leaving the land in the North. Only in the South were their numbers markedly increasing, chiefly through the increase in sharecropping as a form of labour exploitation. Now not only do small farmers cling to the land, but fewer of their sons and daughters are able to escape into industry or some form of city employment. An expanding population of very poor farmers and their families depend upon the land, with a diminishing share in the total farm output that enters into trade. Insofar as they are excluded from commercial agriculture, they are victims of the capitalist process of development. Their presence on the land does not mean that very small-scale commercial production survives in agriculture as an exception to the laws of capitalist development. On the contrary, these very poor farmers are victims of capitalist development which has deprived them of livelihood on the land and has pushed them down into a semi-proletarian destitution.

CHAPTER V

Rent and Land Ownership

LESS than one-fourth of the farm "value"—land and buildings—remains in the possession of unmortgaged owner-farmers who operate no rented land. In 1935 this was true for the country as a whole and for the North and West. In the South, unmortgaged owners hold somewhat more than a fourth but much less than a third of the regional total.

Questions of land tenure, land price and terms of tenancy have pushed into the forefront of political interest. We must therefore understand something of the nature of land prices and rent. And we must trace the chief reasons why ownership of farm land has so largely passed out of the hands of the farmers themselves.

The Nature of Rent

Rent of one kind or another is one of the oldest forms under which some members of the human race have exploited others. It has always been a way of appropriating the product of other men's labour. This is a cornerstone of Marxist theory in relation to land prices and rent. It is a natural development of the basic thesis that labour is the source of value.*

The simpler the economic structure, the more clear and obvious has been the basis of rent. For example, the feudal serf had permanent

* For the chief statements by Karl Marx himself on the nature of rent see *Capital* (Part 6 of Volume III) and *Theorien über den Mehrwert* (Volume II). In this latter work, not yet available in English, Marx gives detailed analysis and discussion of the theories of rent set forth by Ricardo and Rodbertus.

use of a small piece of land which he cultivated a certain number of days every week. During the other days he worked on the landlord's estate, thus paying with part of his labour for the patch of land from which he obtained his own living. Or, later, the feudal tenant had land on which he worked all the time but for which he paid the landlord a stated share of his product.

As markets developed and peasants began to handle money, the rent in kind was gradually displaced by rent in money. But this continued to represent the landlord's claim on the surplus product of his tenants. It was the form under which the labour of tilling the soil was exploited.

Feudal landlords had seized—or inherited from ancestors who had seized—"ownership" of certain areas. Land was not bought and sold. It passed from one ruler to another as the spoils of war. Feudal wealth was based on the "right" of the ruler personally to receive toll from all families living on "his" land. The fact that there developed gradations of rank between the great lord at the top and the peasants who worked the land does not affect the underlying basis of feudal rent. The peasants fed all the lordly families, great and minor, with their surplus product. And the surplus was taken from them in the form of rent.

New sources of wealth developed in the mediæval towns where members of the handicraft guilds exploited apprentices and wage labour, and merchant-bankers drew toll from all those whose products they carried into other regions. This wealth based on non-agricultural labour more and more rivalled and came into open political conflict with the feudal power and the feudal wealth based on land and the exploitation of peasants. Very early some towns achieved complete political independence from feudal rule. Peasants also began to resist the harsh terms of feudal exploitation.

This long-drawn-out struggle against feudalism—with its most spectacular episode the French Revolution beginning in 1789—brought basic changes in the concept of land ownership. Land was not nationalised but it became a form of property, and ownership of land was open to all who could buy it. Where the peasants took over the land they had been cultivating, they set up small ownership with the right to buy and sell their land holdings. Small ownership was a tremendous advance over feudal tenancy. It fitted with the family-sized unit of production and it seemed to promise independence.¹ It was the supreme desire of the poor settlers in the American colonies.

Wealthy British, Dutch, French and Spanish citizens of the 17th and 18th centuries-some feudal landowners, some great merchantbankers-clamored for vast land grants in the North American colonies. They did not expect to set up feudal duchies, but they wanted the money plunder that could be gathered from selling land to the poor settlers. Some large tracts were operated by their owners. So, in the South, colonial planters raised tobacco, rice, sugar-cane and cotton with the aid of indentured servants shipped from the old country and, later, Negro slaves. In the North such large farming operations were rare, but a few aristocrats retained great landed estates and drew much revenue from tenant farmers. Some traces of feudal restriction on land transfer and inheritance had been carried over to the colonies, but these were ended in the American Revolution. Negro slavery, however, was allowed to continue and became increasingly important in the cotton and tobacco country after the very revolution which had wiped out the remnants of feudal land tenure in the colonies.

Sale and leasing of land, which in a capitalist society are inseparable from the private ownership of land, involve immediately questions of price. How much rent will the tenant pay? What is the land "worth" in a sale?

The feudal tenant was legally tied to the soil. He could be compelled to yield to the landlord all that he produced beyond a minimum for his own subsistence. His sons might be taken for feudal armies, but if they wanted to leave the land and become town apprentices they had to escape illegally from the lord's domain. In return, the feudal tenant—the serf—had permanent tenure of his patch of land and could not legally be dispossessed. As inner economic conflicts developed between feudal wealth and commercial wealth, this security of tenure was broken down. So in England, for example, when the landlords found the wool trade more profitable than peasant rents they changed the laws to suit their own interest. Under the English Enclosure Acts from the 15th century onwards, masses of peasants were driven off the land. Deprived of their means of livelihood, these landless peasants became a destitute proletariat available for exploitation in the towns. From their ranks were drawn the indentured servants and many of the free settlers in the North American colonies.

In the revolutionary change from feudalism to the earlier stages of capitalism, legal restrictions holding the tenant to the soil were also weakened and destroyed. He became a "free" citizen, permitted (or compelled) to give up his holding and try to make a living elsewhere. Whether the landlord could demand all of the tenant's surplus product or only a part of it came to depend on the interplay of complex social and economic forces. For free citizens, rent must be low enough to leave the tenant for himself as much as he would be able to earn away from the land. With fuller capitalist development this became a definite relationship which we shall examine in a moment.

Northern colonial settlers were peculiarly free. In the New England sea-coast villages, every settler started with independent ownership of the fields from which he and his family made their living. This was usually supplemented by a common pasture, belonging to the settlement as a whole. But the "common" was secondary to their private individual holdings. Only as families changed and new settlers came in and new generations wanted to pull out and go elsewhere, were titles transferred, and leases and rent and land "values" came into the picture.

Inland, the wealthy absentees who held title to vast tracts with indefinite boundaries could not prevent pioneers from clearing and cultivating farm patches without the formalities of purchase or lease. As new villages grew up and the arm of the law reached out to protect the landlord's rights, the settler could push still further into the wilderness. But squatter settlements were so numerous that enforcement of absentee titles was difficult. And when land was formally sold to frontier settlers, the price was low.* With an unsettled continent before them, the pioneers who moved inland could not be compelled to pay rents or purchase prices related to the values they were producing from the land. Not until the end of the homesteading era, when all the good free land had been taken up, was the formation of rent fully developed throughout American agriculture.

* Early land grants were very large and did serve as a means of transferring to a small number of land grabbers considerable wealth extracted in small sums from the great army of settlers. For an interesting narrative of land grants and speculation see A. M. Sakolski, *The Great American Land Bubble* (1932).

Rent is derived from the labour of cultivating the soil. It is the underlying basis of land "value." Rent is actually measured only when the land is used by a tenant who pays rent to the landlord. It may be lost to sight when the farm operator is also the owner, but in that case he is merely pocketing the rent as part of his total return. And the price paid for land—its "value"—is based on the rent formed upon it.

Rental payments and land prices may be pushed above or drop below the true economic rent (and the corresponding price) derived from the use of the land. So, for example, land may bring a purchase price inflated by speculative hope that future returns from the land will rise above their present level. Since mid-nineteenth century this seems to have happened in all parts of the West, after their respective periods of settlement were completed. The rise in price from the nextto-nothing of the pioneer settler to levels based on rent actually formed by labour on the land was fairly rapid and spectacular. But when this level was reached, the market demand for farm acreage was brisk, and it appeared that the upward trend in land prices would continue indefinitely. Actually they outran the upward trend in values produced by labour on the land.

Rental payments and land prices may lag behind their rent "value." This appears to have happened in New England after the 1890's. Here farm acreage was declining and the type of agriculture was shifting toward the more intensive cultivation which produces more value per acre.

Or a sluggish market for farm real estate (held back by general backwardness in economic development) combined with high interest rates, especially on short-term loans, may pull land prices below the actual rental returns. So, in the South, land prices were generally low until the World War boom, and a considerable part of the exorbitant semi-feudal rent extracted from sharecropper tenants has gone to the merchants and money-lenders. This cut taken by traders and bankers from the landowners' return helped to hold down the price of land in the old South.*

*Since land price is a capitalising of rent, it is also directly affected by differences in the current rate of interest. As interest rates move downward, the capital sumland price—representing a given annual rent moves correspondingly upward. A region where high interest rates prevail has lower land prices in relation to given amounts of rent than a region where interest rates are low. But the fact that land prices may rise above or fall below the actual rent formed on given pieces of land does not contradict the other fact that the rent formed on the land is the underlying basis of land prices.

Landlords, of course, see it the other way around. They consider the rent an item of income created by the capital invested in land. But actually this capital has merely bought a claim to the rent, and the sum required to take title and establish the claim is directly related to the amount of rent which can be forthcoming. The land is "worth" that sum which invested in long-term loans would yield an interest equal to the expected rent. Or, in other words, the land price represents a capitalising of the rent to be derived from value produced on the land. The landlord says: A given sum has been invested in a piece of land; therefore the land should yield me such and such a net return. But both historically and in the actual trends from year to year, the rent which can be drawn from value produced by labour on the land is the determining factor, the underlying basis of the price of land.

Land has no "value" in itself, except as it has embodied permanent results of human labour. The "value" of land as such is merely a price directly related to the rent which can be derived from it. Therefore the primary question is, How much land rent will the farm tenant pay? Or, more precisely, what are the forces within a capitalist society determining the rent that can be drawn from a given piece of farm land?

Basic is the principle already stated that in a capitalist society, where the farmer is at liberty to move about and seek a living on some other piece of land or in some non-farm occupation, the rent must be low enough to leave the farmer a return from his labour equal to the amount which he could earn elsewhere. Then as the farmer's necessary investment in livestock and implements increases, and especially as he becomes an employer of wage labour, he comes to compare his farm return not simply with possible earnings as a wage worker but also with possible profits from a similar investment in some non-farm business. For the commercial farm producer who pays rent to a landlord this relation is clear and obvious. But for the large farmer who is also an owner and therefore pockets the rent formed as part of his gross return, the relation is blurred. He measures his income against his total investment, including land, and compares the resulting rate of return with the possible profits from some other business.

But still our questions are not answered. How can the farmer pay any rent whatever and expect to have left enough income to give him the average rate of profit on his investment?

We must go back once more to certain fundamentals of the capitalist system. These were touched upon in our discussion of the factors in accumulation (Chapter IV, pp. 99 ff.), which stated that in a free competitive market the gross price of all farm products in the country as a whole would roughly equal their total value. But well-equipped, low-cost farms would receive prices above the value they actually produce, and backward, high-cost farms would receive prices below the value they have actually produced. For within agriculture, as in capitalist industry, the total surplus value produced is transformed into profit and distributed among the several enterprises, not according to the surplus value which each separate unit has produced but according to their several amounts of investment and the average rate of profit. This average rate of profit is the ratio of total surplus value to total capital in all establishments.

Agriculture as a whole has lagged far behind industry in the average fixed investment (apart from the cost of land) required for the labourer's use. So in farming the value newly produced by farmers, their families and farm wage workers has a relatively high ratio to the value transferred to the product from materials and machinery. And if the surplus value produced on farms (whether by farm families or by hired labour) were fully realised in money, it would provide a rate of return on farm investment (apart from land) higher than the average rate of profit in industry.

Has this relatively high average ratio of surplus value to total farm investment (apart from land) been actually realised by farmers? Or have the two great branches of our economy—agriculture and nonfarm industry—both been subject to a common average rate of profit based on their combined total of surplus value and their combined total of investment apart from land?

Marx has shown—and this might be called a second cornerstone of the Marxist theory of rent—that private ownership of land maintained an impassable barrier to prevent free interaction between the higher average ratio of surplus value to total investment in agriculture and the lower average ratio of surplus value to total investment in industry. And in the days of relatively free competition—before the forces of industrial and financial monopoly had gripped the mainsprings of economic life—the total surplus value produced on farms was actually realised in the total prices for agricultural products. It did provide a rate of return on farm investment (apart from land) which was considerably higher than the average rate of profit on non-farm capital. But the landowner took as rent the difference between the total surplus value produced on farms and that surplus which would provide for farm investment (apart from the price of land) a rate of profit equivalent to the average rate on non-farm capital.*

In a freely competitive market, prices of farm products would be related to costs on the worst land included in that production which is required to satisfy market demand. Private ownership of land injects into these costs the item of rent.** •

To-day, forces of monopoly and the general crisis of capitalism have made it impossible for most farmers to cover their costs of production. For many this is true even if those costs included no allowance for rent. But this fact need not obscure our understanding of the historical process through which capitalist rent has been developed and the source from which it has been paid. Now, in the continuing general crisis of capitalism, working farmers know from their own experience that rent and land costs take a large slice out of their surplus product and may even rob them of part of their product needed for their own maintenance. We return to this in a moment.

Under capitalism the total rent drawn off as toll by absentee landowners (or pocketed by those landowners who are also farm operators paying no mortgage interest) is made up of two elements—absolute rent and differential rent. Both are derived originally from the margin between the total surplus value produced on farms and that surplus value required for providing the social average rate of profit on farm investment apart from land. These two elements in

^{*} See especially Marx, *Theorien über den Mehrwert* (Dietz, Berlin, 1923), Part I of Volume II, page 196 ff. And for a short summary of this point, Lenin, *Selected Works*, Volume XII, p. 308.

^{**} See previous discussion on pp. 100-101, and further points developed in Chapter VII, pp. 165-166.

rent are practically recognised in every-day transactions. For all land, even the poorest, is supposed to be "worth" something. What Marx calls "absolute rent" is based on the power of private ownership of the limited supply of land. It is expected under capitalism from every piece of land, however poor and unproductive. In addition, a greater return is expected from good land than from poor land. "Differential rent" is the landlord's claim to the greater returns produced on the better pieces of land. This again is shown by Marx to be of two kinds.

The landlord claims as differential rent the extra profit resulting to the farmer's operations from such advantages as greater natural soil fertility, better water supply, more favorable location. Suppose two wheat farms have average equipment and are equally well situated for reaching the market. One has poor soil producing, say, 10 bushels an acre. The other has better soil producing, say, 14 bushels an acre. Everybody knows that other things being equal, the farm with the better soil will bring higher rent, or sell at a higher price, per acre than the farm with the poorer soil. This is one kind of differential rent.

An increased yield per acre results from a greater application of capital. Insofar as the increase in gross return per acre outruns the increase in expenditure for fertiliser, labour, implements or livestock, it tends to increase the farmer's net return. But in the long run, such an increase in net return is drawn off as a higher rent, or a higher land price, and the farmer's net profit on investment (apart from land) is held down to the average rate. This is the second kind of differential rent.

Throughout the development of capitalism absolute rent has hindered the full inter-action of all sections of the total economy in forming an average rate of profit. The higher ratio of surplus value to investment (apart from the price of land) in agriculture was prevented by absolute rent from raising the broad average rate of profit throughout all productive industries. For farmers themselves, the payment of absolute rent (or the corresponding price of land) brought their net return below a true average based on the free interplay of agriculture and industry.*

* In discussing the possibilities of nationalising all land in Russia, during the revolutionary crisis of 1905, Lenin pointed out that public ownership of all land would hasten the development of capitalism and was not, by itself, a socialist measure. NaLand rents in cities and suburbs where the land itself has no part in the productive process are even more obviously based merely on the monopoly claim of the landowner. He has title to parts of the earth's surface on which people must live or work or find recreation. Differences in land price are, however, related to types of building and the pressure of demand for a very limited amount of acreage. The landlord levies all the toll the traffic will bear. For especially desirable commercial sites and for land occupied by profitable tenements, he demands a differential rent, channeling to his pocket part of the surplus profits accruing to those who own the buildings or carry on the business.

Rent drawn from American farm land (whether by absentee landlord, by operator-owner, or by mortgage-holder in the form of interest) includes both absolute rent and differential rent. Also, it includes both fully developed capitalist rent and survivals of earlier stages of economic development.²

In the South, the sharecropper's landlord takes payment in kind and squeezes from the tenant not only all of his surplus product, but part of what is needed for the tenant's maintenance. This rent is similar to feudal exploitation. The system was developed as a substitute for slavery and was buttressed by restrictions on legal rights of Negroes. Nominally free to leave the land, Negro croppers have had no general opportunity in industry to climb out of the most unskilled, most poorly paid occupations. They have never been free citizens in any broad economic sense. Their poverty has pulled down the wages of all white workers in the South. This low wage level in southern industry and in other non-farm occupations has left many poor white farmers with little or no opportunity to improve their lot by leaving the land. They are caught in a vicious circle of destitution and thousands of them have, hitherto, accepted the hardships of the sharecropper status.

Share tenants, owning their tools, managing their farms without detailed supervision and selling their own share of the product themselves, represent a transitional form of rent. The fact that they pay

tionalisation of land in a capitalist country would mean the end of absolute rent, but differential rent, which plays a definite rôle in equalising rates of return, would still be paid to the government. See Lenin, *Selected Works*, Volume XII, p. 310.

rent in kind instead of in money is a survival of pre-capitalist relations. But in the North and West, where such share tenancy has been widely prevalent, it has no feudal roots. It has survived from the early days of pioneer settlement and subsistence farming when tenant and landlord were neighbours, each working his way upward in the early capitalist society. It has not involved any relationship essentially different from that of the cash tenant.

These independent share tenants are now producing primarily for the market. After giving the landlord his share of the surplus product, they expect to have left for their own use a part of the surplus produced beyond a bare maintenance for themselves. Many northern share tenants are large operators employing wage labour whose rent is capitalist rent fully developed except in the method of payment.³

Share tenancy breaks down when the land passes to a non-resident owner (whether company or individual) who wants a definite return and no responsibility for selling farm products. It has also tended to break down in the Northwest since very low prices for grain have left the landlord unsatisfied with his return. So the risk from low prices has been increasingly passed to the tenant by requiring rental payment in cash instead of in kind. Or the landlord has accepted grain for the crop acreage while requiring cash rental for house and barn.*

Small farms with poor equipment and a very low total income produce little or no surplus beyond the farm family's needs. No true economic rent is formed unless the small farmer's net return *before* payment for the land gives him more than he could earn as a wage worker. Here there is no question of average rate of profit, but merely the comparison of farm income and the farmer's possible wages elsewhere. When the farmer produces only the equivalent of a wage worker's living—or even much less than that—no true rent is formed from his labour. His rental payment is exacted as sheer exploitation by the monopoly power of ownership.

In general, the amount of rent formed on farm land has been modified by the growth of monopoly capitalism and the post-war crisis of the capitalist world. Rental payments for land and the prices paid for

^{*} True economic rent is derived only from the application of labour to land. A landlord's return for buildings used by a tenant is really interest on capital invested in their construction, although it is commonly called rent.

land by middle and small farmers have been increasingly drawn not from true economic rent but as direct appropriation by landowners of value needed for the maintenance of the farm family. Let us look at this in some detail.

A declining average rate of profit has been characteristic of capitalist industry as a whole. And, further, monopoly has introduced behind the declining average rate of profit in non-farm business, a sharp contrast between the relatively high profits drawn from great corporations and the low rate of profit of small concerns.⁴

Since farmers, except a tiny minority at the very top, have small individual investments, they are to be compared with very small business or the very small investor. They could not expect to retain (after deduction of rent) a profit equal to the broad average of all non-farm business but, at best, only a profit equal to the very low average profit of small non-farm concerns. So even while farmers' total income was rising, their rate of net return would have tended to fall, keeping more or less parallel with the declining rate of profit in industry and, especially, in small industrial units.

But, as we have said, the small farmers—and also most of the middle farmers in this world of big business—would actually decide on whether to stay in farming or to shift to some other occupation by comparing their net return on the land with the conditions and the yearly earnings of wage workers. The question of average rate of profit on their farm investment comes into the picture only after a wage worker's minimum is assured them on the farm. Here also the general crisis of capitalism has operated against the farmer.

After the World War, industrial expansion continued with a declining number of productive workers. Even before 1929, when service industries and filling stations were taking up several hundreds of thousands who could no longer find work in manufacturing, mining or transportation, the extent of mass unemployment was estimated at nearly four million workers. After the crash, this number of unemployed workers was doubled, then doubled again. "Recovery" after the low point of 1932-33 left a continuing mass unemployment involving more than ten million non-farm workers.

Farm rent and land prices have been directly affected by this phase of the general crisis. The basic minimum which in the interplay of

economic forces is left for the farmer after deduction of rent has been pushed to a record low during the twenty years since the World War and especially during the 1930's. It is determined (as we stated at the beginning of this discussion) by the farmers' opportunity to earn wages and make profits in other occupations. Mass unemployment has closed the door of opportunity for farmers or their sons and daughters to shift into industrial work. Profits for small business men have been sharply reduced. Many of them have gone completely bankrupt and dropped into the ranks of the proletariat. The minimum to which the farmer can be pushed by deduction of rent (or its equivalent) is down to the merest bare subsistence. We have returned to a situation which makes it possible for the capitalist landlord—as it was possible for the feudal landlord—to take as rent all surplus value produced (and realised) by the farm family and the small amount of wage labour employed by the middle farmer.

While farmers' net return after deduction of land costs has been pushed down by the general crisis of capitalism almost to bare subsistence level, the actual amounts drawn off as rent have not increased. The sharp drop in the floor determining the basic minimum which must remain for the farmer after deduction of rent has not widened the margin from which owners derive rent and creditors derive their mortgage interest. For while the basic minimum return has fallen, the farmers' gross income has also been sharply cut. Prices of most farm products have been pushed far below the values which they embody.

Especially in the crisis since 1929, the margin between total return and the basic minimum for the farmer has actually been narrowed. The basic minimum has fallen to subsistence levels because of the general conditions in non-farm business and industry. But the farmers' total return has dropped even more sharply in the marketing phase of the farm crisis which we shall discuss in later chapters.

These broad trends have weighed most heavily on medium-sized and small farms which employ little wage labour or none at all. Large farms, completely capitalist units, dependent wholly upon wage labour, have passed on to the wage workers the burden of the cost of land. By holding farm wage rates below the rates for industrial labour, the farm employer takes for himself not only the "normal" surplus value produced by the wage workers but part of the value required for the workers' own maintenance. Where considerable numbers of wage workers are employed—as on the larger intensive crop farms raising fruit, vegetables, cotton, sugar, rice, tobacco, potatoes—this extreme exploitation of wage labour provides an extra reservoir of surplus value from which rent is drawn without reduction of the operator's profits. At the same time, these capitalist farms are in a relatively strong position to protect themselves against sharp decline in prices. Therefore large farm concerns have no special land problems as long as they are able to pay less than living wages to their hired labour. From this extreme exploitation of the workers they derive enough extra value to meet high land costs without making inroads on their own profits.

What Happened to Farm Ownership

"Farm land rented in 1935 constituted more than 45% of all the farm land in the country as compared with only 31% in 1900. Tenants, including croppers, operated 42% of all the farms in 1935, as compared with 25% in 1880....Rent paid by farmers in the United States to nonfarmers in 1935 is estimated at \$699,000,000...and in 1937 at \$829,000,000.

"Mortgage debt constitutes an increasing proportion of the value of farm real estate.... The debt load has about doubled during the last quarter of a century. In 1880 the equity of farm operators in farm real estate in the United States as a whole was about 62% of the value of all farm real estate. By 1930 the proportion has fallen to 41%, and by 1935 to 39%."⁵

Land and the farmers' debts have been a problem since long before the period of monopoly capitalism. When western land was opened free to settlers under the Homestead Act of 1862, it gave an outlet for farmers (and workers) overburdened by difficulties in the older East. During the next thirty years the growth of production on cheap western land intensified the crisis for eastern farmers. And even while the farmers in the "free" West captured the markets for grain and cattle, these western farmers also developed problems of their own.

Western grain had a ready market in the East and in Europe, since it could underbid the grain from eastern farms. The yield per acre was lower in the prairie states than in New York or Pennsylvania, but on the whole the western farmers developed well-equipped farms with a larger acreage. The farmer's labour produced more wheat than the eastern farmer could produce on his smaller farm. As long as western land was cheap and abundant, the lower yield per acre did not increase the cost. Cheap western land undermined the old grain and cattle farming of the Atlantic coast states.

So eastern farming (from Maine to Maryland) went through a long-drawn-out crisis in its competition with the expanding West. Slowly it was readjusted to the specialised production which supplies, mainly, perishable foods for the large industrial population of this region. Total numbers of farmers in the North Atlantic states dropped by 31% during the fifty years from 1880 to 1930, and actual displacement of individual farm families was even greater. This regional farm crisis left its mark in abandoned fields and empty houses, but it created no profound economic problem. Doors of opportunity were still open in the expanding agriculture of the West and the expanding industry of the East.

In the West it was comparatively easy for genuine homestead settlers to acquire a quarter-section of land, but not always so easy for them to carry on successful farming. Conflicting trends developed even while western farming expanded. Productivity of farm labour was increasing everywhere with the rapid improvement in horsedrawn implements and their more general use. Large western farms, with the lowest costs, produced a steadily increasing percentage of the total output of grain. But these very facts were reducing the value embodied in each bushel of wheat and, other things being equal, wheat prices would tend to move downwards.

This natural downward trend was sharpened by the collapse of the general price level after the peak of Civil War inflation. Prices dropped again in the economic crisis of 1873. Although they were stabilised at a low level when the country went on gold in 1879, they dropped once more in the general depression of the 1880's and still farther in the severe crisis of the 1890's.

Wheat prices throughout this period declined more sharply than the price index of all commodities. Wheat always moves irregularly, with variations in crop volume, world market, and the manœuvres of speculative traders, but its general trend was clearly downward throughout the first thirty years after the Civil War.

At the same time, land prices in the West were rising rapidly, as rent and land "value" were in process of formation. "Free" land was quickly sold, and speculators helped to push up the prices. An uncounted number took up homesteads solely for the purpose of gathering in a tidy sum by selling out as soon as they had established title. The new western railroads also played an important rôle in raising the price of western land.

Transportation was important for bringing in lumber and barbed wire and other manufactured supplies and for carrying the farmers' grain to market. With the building of railroad lines, settlers spread over the vast areas not reached by navigable rivers. Homesteaders taking up free land near a railroad fared well, on the whole, but many settlers who had taken up land on the promise of railroad service found that the route had been changed and they were stranded. And possibilities of acquiring *good* free land near the railroad were limited by the huge grants of public land handed by corrupt politicians to the railroad companies. On these grants, land was closed to free settlement and could only be purchased.

In spite of these difficulties (and others already referred to in Chapter III) under which many honest homesteaders had to give up the struggle for comfortable independence on the land, pioneers continued to stream westward. Almost any settler could sell his farm if he wanted to leave it. In 1890, farms in Kansas or Minnesota brought the same average price per acre as farms in New Hampshire or Vermont.

This was all very neat for those who wanted to give up farming. And the boom in western land concealed the fact that many settlers were unable to make a living as farmers. Also, those who gave up farming found genuine alternatives in the expanding trade and industry of the 19th century. Mining, railroads, skilled trades, storekeeping, banking were growing in the West so that discouraged settlers did not have to return to the industrial East to make a living.

For those who remained on western farms, rising land prices had one immediate advantage. Settlers with clear titles could borrow capital by mortgaging their farms. But those who came too late for free

land and wanted to buy a farm found it increasingly difficult to achieve ownership with clear title. The mortgage carried by a farmer as part of his purchase price does not give him capital for farm equipment but starts him with a load of debt represented only by the land he operates.

As net result of falling prices for the western farmers' grain and rising prices for their land, the 1890's began with more tenant farmers in the newly settled regions from Minnesota and Dakota to Kansas than in New England. Already the percentage of tenancy was higher in Iowa, Kansas and Nebraska than in New York or Pennsylvania or in any New England state. Already more of the owner-farmers were mortgaged in the new Northwest than in the North Atlantic region.

Then in the 1890's, farmers throughout the country were deeply affected by the severe economic crisis which shook American industry and finance. When that critical decade began, more than one farm in five between the Hudson River and the dry prairies was a tenant farm. At the end of the 'nineties more than one farm in four was a tenant farm.

In the North and the West farm prosperity seemed to blossom after the crisis of the 'nineties. Taking the country as a whole, prices of farm products rose more than other commodity prices between 1900 and 1910, and tenancy increased very slightly. But even during this decade the percentage of tenant farmers moved definitely upward in Minnesota and the prairie states (especially Iowa and the Dakotas) and in the cotton states of the South. Elsewhere tenancy declined, but almost everywhere more owners were mortgaging their farms.

When prosperity yielded to a general economic decline between 1910 and the beginning of the World-War boom, prices of farm products dropped along with other prices. This pre-war depression was relatively slight for the farmers, in comparison with the crisis of the 1890's and the severe crises since the World War. But everywhere except in the Northeast it found tenants paying much higher rents than they had paid ten or twenty years before, and in the prairie states it found mortgaged owners carrying a much larger mortgage debt. Between 1900 and 1910 prosperity (and speculation in land) had pushed up the prices of farm land everywhere. They had risen far more than the general index of farm products. In the West, land prices had risen more than the price of wheat. In the South, land prices had risen more than the price of cotton.

This long rising trend in land prices which prevailed generally in the 19th century and until the peak of the World-War boom, introduced conflicting elements in the whole attitude of the American farmer toward his farm business.

The working farmer is an individual producer, a survivor of the period when all goods were produced by family groups or individuals working alone. Small and middle farmers are not yet carrying on a social form of production based on division of labour and requiring that groups of workers co-operate in the production of each unit of output. All farmers are now dependent on purchased tools and equipment, and most of the farm products pass through other hands before they are ready for the ultimate consumer. But the middle farmer's own work of raising crops and tending livestock on his farm has remained an individual matter. He may employ a small amount of hired help, but he is still essentially an individual producer. As such he naturally desires complete control over his means of production. He wants the independence of security in the possession of his land. Only with a deed for clear title in his pocket, is he master of a piece of this earth's surface which he can use in any way that he wishes.

It is as natural for him to desire secure possession as for the skilled cabinet maker to treasure his own individual tools. More so, for the farmer has wanted to improve the land according to his own ideas. He has planted fruit trees and built barns. He has drained a swampy field and cleaned out weeds. He has enriched the soil in order to enjoy the results of his labour on a farm that grows better and more productive from year to year.

In the United States, all this has been bound up with the farmer's ownership of his land. Tenants have had no security. They can rarely count on receiving from the landlord any compensation for permanent improvements made by the tenant at his own expense. But very early in our history a conflict developed between the farmer's desire for independence and permanence and his opportunity to utilise for his immediate advantage the rising price of land. This conflict appeared in many phases of the farmer's actions. He wanted the independence of ownership, and he could venture to buy on mortgage

because if things turned out badly he could always pull out and get back more than he had paid for his farm. He wanted to improve the farm, but often more compelling was the impulse to use the land to the limit for immediate returns. For he could sell his farm at a profit and move on, either to a better farm in the same region, or to a larger farm where land was cheaper. So the farmer kept his eyes constantly on the price of land, and often regarded his farm itself as a commodity which might yield him in a sale far more than he could gather in through the actual process of well-planned, long-range farming.

In buying a farm, the farmer often risked a heavier debt than his earnings would allow him to carry with ease. Or having clear title, he might borrow heavily for building or for buying new livestock and better implements. Farmers were able to borrow on this basis since their richer neighbours, and the country bankers, and even the insurance companies commonly gauged the soundness of a farm mortgage by its relation to the price of the land and its expected future trend, rather than by the farmer's immediate net return from current operations.

This approach to the question of farmers' borrowing has been deeply ingrained. Even now, after twenty years of low land prices and the storm of foreclosures through which (at the farmers' expense) inflated prices and inflated mortgage debt were partly rectified, farmers look back to the golden days of high land "values." The fact that there is no prospect of another boom in farm land reflects the crisis of agriculture. It means losses to farm owners who bought when prices were high. Land prices based on economic rent, without inflation for speculative hopes, reduce the toll taken from tenants. Other things being equal, they would also increase the possibilities of ownership by working farmers. But unless they can look forward to rising land prices, farmers hesitate to buy.

Of course, borrowing on mortgage would, in any case, have played an important rôle in farmers' expansion. They needed increasing sums for modern equipment, for better livestock, and for higher current costs of operation. For the mass of farmers, with limited resources and no possibility of rapid accumulation, expansion naturally involved the withdrawing of "capital" from the luxury of a clear title to land in order to acquire larger funds for the actual process of production. This is the underlying basis of another conflict within the individual farmer's operations. Farmers have looked toward free unmortgaged ownership as the goal of their desire. At the same time, competitive forces and the urge to successful farming have made it necessary for them to put relatively less of their individual investment into land and more into all the apparatus of farm operation. As a natural result, ownership of farm land has slipped more and more out of the hands of the middle farmers.

Economic classes among farmers are determined primarily by the extent to which wage labour is employed. At the same time there are certain roughly corresponding differences among farmers in their relation to land tenure. Of course every type of tenure except Southern sharecropping includes some farms that are very large, some that are very small, and all grades of size between these extremes. But they are differently weighted with large, small, and medium-sized units and their different averages are extremely significant. As measures of size we are using reported value of farm land and equipment as given in the census.

Throughout the North and West the same trend has been everywhere apparent. Smallest, on the whole, are farms of unmortgaged owners. Next larger—and evidently predominating among "middle" farmers—are mortgaged owners and tenant farmers. Above these are the part-owner farms (both mortgaged and unmortgaged) where the owner-farmer rents additional land. At the top are the manager farms operated for absentee owners by a salaried farmer.

Already by 1920 the average value of land and buildings was larger for mortgaged owners than for those holding clear title to all the land they operated. At the peak of the war boom this was true for every one of the nine geographical divisions of the country. Except in the region from New York and New Jersey to Wisconsin and Illinois it was true even in 1910. This relationship has persisted throughout the crisis.

Farming in the North and West showed a similar increase in the relative scale of operation by those who own no land at all. Farmers have wanted to move "up the ladder" from tenancy to ownership, but

very many of them have moved up the ladder in another way, by expanding their scale of operation while remaining tenants. In 1920 and again in 1930, tenant farmers showed a higher average value than full owners, and even a higher average value than mortgaged full owners. This was true for both years in every section of North and West except New England.* Slight differences between tenants and owners might possibly be due to differences in the valuation reported to census enumerators. But tenants in every section of the North and West have had larger total acreage than full owners, larger crop acreage, and larger average investment in implements and machinery.

In the South, tenant farms have been poorer than owner farms except in Texas where cash tenants had, on the average in 1930, more valuable farms than full owners.** But throughout the South—as in the North and West—mortgaged owners have had, on the average, more valuable farms than the unmortgaged owners renting no additional land.

Since unmortgaged owners have the smallest farms in the North and West they also have less than their proportionate share of the total farm value. This has changed very slightly since 1920. In 1935 unmortgaged owners renting no additional land were 30% of all farmers in the North and West and held 21% of the total value in land and buildings. In the South, where unmortgaged owners are, on the whole, larger than tenants but smaller than mortgaged owners, they declined more sharply during the 1920's in number and in their share of total farm value.

Like most averages, these figures for the North and West conceal wide variations among the different regions. More than four farmers out of ten were still unmortgaged owners of all the land they operated in 1935 in New England and Middle Atlantic states (that is, the average from Maine to Pennsylvania). About three farmers out of ten

* During the five hard years between the census of 1930 and the census of 1935, tenant farms dropped somewhat more than owner farms in average value. In Pacific states and East North Central states, the tenant farms were still in 1935 somewhat more valuable than owner farms whether mortgaged or unmortgaged. Elsewhere (except in New England) tenant farms ranked in 1935 somewhat lower than mortgaged owner farms but considerably above the averages of owner farms clear of mortgage debt. (See tables in Appendices I and J.)

** Delaware and Maryland follow the trends in North Atlantic states although classified as part of the South.

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were unmortgaged owners in the Far West (Mountain and Pacific states) and in the East North Central states (Ohio to Wisconsin). Only two farmers out of ten were unmortgaged owners of all the land they operate in the West North Central states (from Minnesota to Kansas). Why should the farmers along the North Atlantic have such a markedly high survival of unmortgaged ownership? Why should the farmers of the prairie states have lost ownership more than those in any other region outside of the South?

PERCENTAGE OF FARMS AND FARM VALUE (LAND AND BUILDINGS) OPERATED BY UNMORTGAGED FULL OWNERS: 1920, 1930, 1935

		Farms, in per cent	Farm value, in per cent
North and West			-
	1920	34.3 °	23.1 ^b
	1930	29.1	19.8
	1935	30.3	21.3
South			Ū.
	1920	33.1 *	33.7 *
	1930	24.4	25.2
	1935	26.6	26.8

"For distribution and averages by tenure, see Appendices I and J.

^b Includes full owners whose mortgage status was not reported.

The North Atlantic states, where farms and farm acreage were declining, escaped the boom in farm land prices which swept over the rest of the country between 1900 and 1910 and again during the World War. Average farm land prices moved upward, it is true, and continued to move upward after 1920, partly because the abandonment of much poor land was continuing; partly because intensive farming, with large product per acre was increasing. The average differential rent was rising. But in the North Atlantic states (more, even, than in the Pacific states) the thirty-year period from 1900 to 1930 showed a markedly greater net increase in average product per farm than in land price or in farm capital. Average farm capital rose more than the average price of land per farm, but the average gross product per farm rose considerably more than either. When operating returns rise

more than land prices, it is relatively easy for farmers to retain ownership.

INCREASE IN AVERAGE LAND PRICE, BUILDINGS AND CAPITAL, AND GROSS VALUE OF PRODUCT, BY REGION WITHIN NORTH AND WEST: 1900-1930

	Percentage	of net increase, 1900-19	30, per farm
	Land price	Buildings and capital	Gross product
New England	139	215	293
Middle Atlantic	43	188	207
Pacific	162	165	204
Mountain	201	63	191
East North Central	82	236	168
West North Central	185	207	197

In the West North Central states, the net increase in average gross product had barely kept pace with the net increase in land and capital. Nowhere in the North had land prices risen so high (in percentage of increase) during the World-War boom. No other region was so hard hit by the collapse of wheat prices when the war-time control was withdrawn. Here especially, the sharp post-war decline of income found the farmers carrying debts based on boom prices for grain and for land. Here also this thirty-year period (1900-1930) had begun with a high percentage of tenants and mortgaged owners. This, in turn, had been related to a similar land boom, followed by collapse of income in the 80's and 90's. Land-boom prices for farm acreage have been a definite factor in the high ratio of tenancy and mortgage debt.

Middle and small farmers have been increasingly aware of the fact that they are exploited by landlords and mortgagees. But few realise as yet that this exploitation has grown inevitably out of the free interplay of capitalist forces and the private ownership of land. It is forgotten that even before the long-drawn-out farm crisis of the 1920's and 1930's two farms out of three were using rented or mortgaged land or were operated by a salaried manager. It is overlooked that in the North and West where capitalism is most highly developed, the unmortgaged farmer-owner has for many years stood at the foot—and not at the top—of the agricultural ladder. Expansion is no longer based primarily on the achievement of unmortgaged ownership. This does

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not mean, however, that such separation of land ownership and farm operation is desirable. Quite the contrary. It is one of the basic trends increasing the instability of the working farmer.

INDEX OF TREND IN "VALUE" OF LAND AND BUILDINGS PER ACRE: 1880-1935

1880	1890	I 900	I 920	1030	1025
105	96	100	210	256	227
110	110	100	170	185	135
81	9 2	100	300	100	134
64	85	100	411	247	140
200	184	100	369	214	I40
74	137	100	412	305	265
76	98	100	460	385	251
77	91	100	404	321	211
83	123	100	562	489	311
	1880 105 110 81 64 200 74 76 77 83	1880 1890 105 96 110 110 81 92 64 85 200 184 74 137 76 98 77 91 83 123	1880 1890 1900 105 96 100 110 110 100 81 92 100 64 85 100 200 184 100 74 137 100 76 98 100 77 91 100 83 123 100	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

INDEX OF TREND IN LAND "VALUES" PER ACRE: 1000-1030

	"Value"	ue" Index			
	1900	1900	1910	1920	1930
New England	\$13.79	100	141	208	224
Middle Atlantic	27.19	100	125	151	135
East North Central	34.15	100	180	300	163
West North Central	1 9.37	100	223	429	226
Mountain	б.12	100	322	300	212
Pacific	17.78	100	2 46	417	280
South Atlantic	8.63	100	210	474	246
East South Central	8.72	100	187	171 121	205
West South Central	5.40	100	2 97	577	485

In this respect the five years from 1929 to 1934 brought no decisive change. The decline in number of sharecroppers (noted in Chapter III) reduced the total tenancy rate in the South and in the United States as a whole. But the percentage of other tenants in the South did not decline, and in every section of the North and West the tenancy rate increased. In the wave of mortgage foreclosures total mortgage debt was reduced, but prices of farm real estate dropped more sharply than total farm mortgage debt, and the burden of debt became relatively heavier than it was before. Some farms have been
picked up at bargain prices so that the percentage of unmortgaged owners was slightly increased, but the ratio of debt to market value on mortgaged farms is definitely higher than it was before the crisis.

It is especially important to realise that this whole trend of rising tenancy and mortgage debt was clearly marked before the World War boom in agriculture. The problems involved were intensified to the point of crisis with the collapse of the war boom in 1920-21. But they were not created by that boom and its collapse. They have been inherent in the economic process which we have described. They are an integral part of capitalist development in agriculture. Absentee ownership of farm land and heavy mortgage liens on farms owned by farmers have become one of the basic forms under which working farmers are exploited by finance capital.

CHAPTER VI

Wage Workers on the Land *

BROAD principles of economic development, with which the previous chapters have been concerned, give perspective on the present crisis. Now the crisis itself must be analysed. What is happening to the three major groups of workers on the land: wage-earners, very small farmers, and medium-sized commercial producers?

Farm wage workers in the later 1920's numbered well over 3,500,000 in the busiest months and over two million in the slowest months of the farm season. Hired workers are still about one-quarter of all who are engaged in agricultural pursuits in this country. Numbering even in 1938 over three million at the peaks of employment, these farm wage workers, in general, have lower wages and less protection from state and federal laws than any other body of wage labour in the United States.

The growth of this great mass of severely exploited workers has been an integral part of capitalist development. For wage labour can be recruited only from those who have no independent means of existence, and the creation of a proletariat, seeking employment, is an essential feature of the capitalist process.

In this new country-new to the white settlers who sought a living here—the earliest exploitation of labour could be carried through only by force. Native Indians fought and fled before the invaders. But unnumbered victims of industrial and social change in Europe were imported as indentured servants. The violent slave trade which seized

* This chapter incorporates a memorandum prepared by Labour Research Association,



Negroes in Africa and sold them in the United States was profitable because of the increasing thirst for exploitable labour.

As modern industry developed during the 19th century and until the World War, it clamoured for wage workers. It drew from the land sons and daughters of farmers; discouraged poor farmers; and masses of poor peasants and city proletariat who swarmed over from Europe to the land of rapid expansion and genuine opportunity. American agriculture also expanded, but more slowly.

So long as this expansion continued, many of those who began as wage workers, compelled to sell their labour power, were able to step over into the ranks of business men and employers of wage labour. But all the while there remained a growing number of those who must sell their labour power or starve. From the earliest years, the percentage of wage-workers among all gainfully occupied persons was rising.

Even on the land, wage labour increased more rapidly than the numbers of farm operators and their unpaid family workers. And even on the land the sources of wage labour have included at least four different categories.

First, and most widely recognised, were the thousands of young men born on farms or in villages who sought steady farm employment as a preliminary to setting up a farm of their own. Second, were the poor farmers who for various reasons could not make a living on the land but who clung to their farms while they also did other more or less irregular work in their own neighbourhood. Third, were farmers who had left their farms, having failed to make a go of it, and who lived by rural wage labour. Many of these latter joined the army of drifting, migratory workers, from which large-scale farmers have drawn their masses of seasonal labour. Fourth, were very poor foreignborn workers who had never achieved any hold on the land as farmers in the United States.

Each of these groups has been vitally affected by the crisis of recent years. Farmers' sons have little hope of becoming successful farmers. Tens of thousands of sharecroppers in the South and other thousands of poor farmers in the drought areas have been driven off their farms. City unemployment has become a permanent problem involving from ten to fifteen millions of men and women workers.

At the same time, total numbers of wage workers on farms have

been cut. After hitting in 1934 a low yearly average about 24% below the peak of 1926, the number employed on farms in 1938 remained at a yearly average of about 2,500,000, or from four to five hundred thousand below the pre-crisis figures.

Before we look at the special conditions under which this great body of wage workers is exploited, let us see what we know about the relative importance of the several groups among farm wage workers to-day.

Who They Are

For the very small farmers, clinging still to their poor patches of land, the Census of Agriculture gives us certain information on their other work. There were about 2,000,000 farmers, or about 30% of all, who did some work away from their farms in 1934. But the great majority of these were engaged in non-farm occupations.

In seven states (California, Oregon, Texas, Arkansas, Louisiana, Mississippi and Iowa), more than a fifth of these part-time farmers were doing work reported as agricultural. The total number reporting such work was only 279,000 in the country as a whole. We might perhaps assume that all the 315,000 part-time farmers who failed to report on type of work were also employed in agriculture. Even with this uncertain assumption, the total number of part-time farmers who could be counted as part of the agricultural labour army in 1934 would still be only 593,755. Of nearly three million farm wage workers (in the peak months of 1934), less than one-fifth were from the group of poor farmers still clinging to their farms.

What about the other four-fifths of this great body of agricultural labourers? Who are these men, women, children and youth that make up this vast farm wage labour force in the United States to-day? In attempting to answer these questions, we supplement the inadequate census data with the findings of various local studies. No complete statistical analysis can be given from available material.

Farm youth, 16 to 24 years old, formed more than a third (37.5%) of all hired farm workers in 1930, as shown in the census. Although the census count was taken in April, before the peak of agricultural employment, it showed 1,026,812 of these young sons and daughters of

farmers at work for pay on the farms and in the orchards. Rural-farm youth (16-24) totalled 5,140,900 in that census month, and of these onefifth were labouring as "hired workers" on farms. These are distinct from the youth working without wages on the family farm.

Younger than these farm youth are the farmers' children under 16 years old, who work in agriculture a good part of the year. While according to the census few children are included among farm wage workers, its figures understate the true situation. The census of April, 1930, counted 67,153 children as farm wage workers—only 2.5% of all agricultural labour at that time of the year.* But April employment is not only below the seasonal peaks but even below the average for all seasons.

Recent surveys by the National Child Labour Committee reveal that additional thousands of small children still labour in the fields, at low wages, during the peak seasons. Though the census does not list child workers under 10 years old, these smaller children do work in the fields. "Every large-scale child employing occupation in agriculture uses them, particularly those specialising in family group labour," as pointed out by Lumpkin and Douglas in their study, *Child Workers in America*. They estimate that a fourth of those employed under 16 are less than 10 years old.

Let no one, they warn, carry in his mind "a pretty picture of the agricultural childworker as the big boy or girl helping father and mother on the farm a few hours during the day, during vacations especially." Children do all the different kinds of laborious agricultural work that adults do, except for the surprisingly small number of jobs that they are physically unable to attempt. "They do hoeing, ploughing, harrowing, weeding, struggling with heavy plough handles, bending double hour after hour chopping out weeds, with a 'short' hoe made for a man but held in the middle by a 10-year-old; . . . they thin this crop and that crop, their young fingers nimble, their backs bent, heads down close to the ground, hitching or crawling or squatting, acre after acre. . . They pick fruits and berries . . . they pick

^{*}It listed also 402,344 children under 16 as unpaid family workers on farms. Counting both these groups, children formed 10.7% of all farm workers, paid and unpaid, the great majority of them in southern states where farm incomes and wage rates are lowest.

cotton, fingers flying, both hands, and a great bag, getting heavier with each handful, dragging after them by one shoulder."¹

In cotton and fruit picking regions, the school year is cut short, so the children may work in the fields all day. By the time the children in cotton areas reach grade school age they are able to pick from 40 to 100 pounds a day, as against the 200 to 400 pounds picked by an adult. The pay is three-fourths of a cent a pound, and the hours from early morning until sundown.²

Only in the sugar beet industry has agricultural child labour been regulated with some degree of success. By terms of the sugar act of 1937, sugar beet and cane growers are not eligible for AAA benefit payments if they employ children under 14 in the production, cultivation or harvesting of sugar beets or sugar cane. In other agricultural industries, little or no effort has been made to eliminate child labour.

Farmer demand for the labour of children and also of women is greatest in sections producing truck crops, small fruits and cotton. In these crops there is a large amount of work that is considered within the strength and ability of women and children. "Much of it requires stooping, and light dexterous hand work, such as weeding and picking crops," reports the U. S. Department of Agriculture in *A Graphic Summary of Farm Labour and Population.* "A large volume of woman and child labour is employed in agriculture because of the demand for cheap labour, and because of the economic need of many rural families for all possible production and earnings." ⁸ Women employed as farm wage workers in April, 1930, numbered 171,323, or about 6.3% of all hired workers in agriculture, mostly from southern states, and a majority of them Negroes.

Among all hired farm workers in April, 1930, Negroes (men, women and children) numbered 539,307, or about one-fifth of the total. Later in the year great numbers are drawn out from the southern cities and towns for seasonal labour. But among the drifting groups of migratory workers, Negroes make up only about 5% according to recent studies.⁴

Why fewer Negroes are on the road to seek paid jobs on farms and in the fields is explained in a WPA study:

"The small proportion of Negroes among the migratory-casual workers studied is a reflection of the fact that for them employment opportunities on the road are limited.... The only striking example of migration of Negroes in recent years was the movement of southern Negroes to the industrial centers of the North during and after the World War."⁵

Race prejudice increases the difficulties of travel and limits the number of jobs open to Negro farm wage workers. Vagrancy laws in the South and Southwest are often interpreted in such a way as to force Negro workers to take jobs in the fields, at lowest wages, or go to jail for having no job. In the Old South, "where the Negro is most numerous, he provides a ready supply of cheap labour for agricultural . . . operations that otherwise would require a mobile labour reserve for seasonal and intermittent peaks of activity." ⁶

Foreign-born workers form a larger part of all farm wage labour than do Negro workers and also a larger part of the migratory labour force. Historically, the foreign-born have been more significant than they are to-day among the rural wage workers. In 1930, the census counted 371,443 foreign-born hired farm workers, or 13.5% of all farm wage labour, divided almost equally between foreign white and other nationalities, in which are included Mexican, Chinese and Japanese. Among all migratory workers, Mexicans are now about 9%, according to recent estimates.

Many of the migratory workers are farmers who have left their farms because they could not make a living and now exist by selling their labour power in the fields and orchards. But they also include workers with a long background of non-farm casual labour. WPA in its survey of *Migratory Cotton Pickers in Arizona* (1939) found that over a fourth (29%) had been cotton tenants and a fifth (20%) were cotton farm hands. An additional 14% had been usually occupied on other types of farms; 4% as operators and 10% as farm hands. A little more than a fourth had been in other industries—12% as skilled, 6% as semi-skilled, and 10% as unskilled industrial workers, while the rest were from scattered groups or reported no usual occupations.

So also in other states of the Southwest and in California, the Farm Security Administration in its study of *Migrant Farm Labour: the Problem and Ways of Meeting It* (1939) reported that "a great part of the present mobile group are dispossessed land holders and farmers." Depression, drought and the increased mechanisation of agriculture, the FSA found, were the main factors that drove thousands of owners, tenants and labourers toward the west—landless farmers in search of work. The peak of this upheaval from drought and other causes was highest from 1933 to 1936.

"Arizona's cotton, lettuce and truck crops, Washington and Oregon with hops, berries, apples and other fruits, Utah with beets and Idaho with beets, potatoes and other field crops, Colorado's melons and lettuce all need a large volume of so-called 'hand labour' for their harvesting, processing and marketing. Cotton picking on the high plains of Oklahoma and northern Texas during the fall diverts some of the inter-state labour migration into that area for seasonal employment."⁷

So the moving army of farm labour grows—drawn on by ballyhoo advertisements of farm industrialists who want a surplus of labour from which to choose. Just as the Joads in Steinbeck's *Grapes of Wrath* showed every one the orange-coloured "ad" for labour, so the word spreads and others take to the road. No one knows how many migrant farm workers there are to-day but we have certain regional estimates.

For the Southwest alone "the minimum figure is around 300,000 men, women and children who work north from winter and spring employment in truck crops in the lower Rio Grande Valley and wind up picking cotton on the Texas-Oklahoma plains in the fall months. Some observers put the Texas nomads as high as 600,000 individuals, or upward of 100,000 families." ⁸ Along the western coast and through the Pacific slope states, the number of migrants following the crops is estimated as 200,000 to 300,000 men, women and children.

In 1935, the number of workers needed in 33 agricultural counties of California, as estimated by the California Relief Administration, was 198,000. But state authorities report that 221,000 migrants entered the state between 1933 and the end of 1938, many of them Dust Bowl refugees who had been "burned out, blown out, eaten out," as described by Carey McWilliams in his excellent study, *Factories in the Field.*⁹ This migration is characterised as one of the greatest inter-state movements of people since the gold rush that began in 1849.

But the problem of migratory farm labour is not confined to the West and Southwest. Arkansas, Florida, New Jersey and other states

have field and orchard seasonal crops that employ migrant labour in family groups, some moving only within the state, others crossing state lines. In the Florida citrus industry, for example, over 100,000 workers travel from the small towns to the groves every day during the season. In the Northwest, Minneapolis is one of the important concentration points for migratory-casual farm workers. Many go out from this city and return to it year after year with only occasional trips beyond the surrounding region.¹⁰

A map showing travel routes of farm wage workers has heaviest lines on the Pacific Coast, but Minnesota, North and South Dakota and Iowa still show travel for migratory labour in grain harvesting. Counting all groups of migratory farm labour, in the East as well as in the West, there are certainly well over half a million included in this drifting army of agricultural workers, following the seasons from early spring to late autumn.

Employment and Working Conditions

Increasing concentration of hired farm labour on large farms, located mainly in certain areas, means that there are fewer job opportunities near their homes for the poor farmers, who still cling to their own farms while seeking part-time work as hired labourers, and for farm youth who need paid jobs. A high degree of such concentration is indicated in census figures.

Of 6,812,350 farms in January, 1935, when the census was taken, only 967,594, or about one in seven, employed any hired labour. Even in July, during the peak of employment, the number of farms on which workers were hired was estimated as less than 1,500,000. And in January, the month of smallest total employment on farms, the census showed that nearly one-third of all hired workers were on 63,809 farms with four or more hired workers, and about one-sixth were on the much smaller group of 16,840 farms with eight or more.*

Areas of largest concentration of farms with groups of hired

* Estimates based on census data for 1929 indicate that about 22% of total wages paid for farm labour in that year were paid by the 24,981 farms reporting \$20,000 or more of gross income. See Appendix K, p. 288. Since then employment on "middle" farms has declined and the percentage of total wage labour on large farms has increased. (See Chapter IV, p. 86.)

workers, as distinguished from one or two hired hands, were the Delta cotton, the range areas, and certain states including Florida, Arizona and California. In California, 59% of all hired agricultural workers were on farms employing four or more, and 42% were on farms employing eight or more. Florida showed similar concentration, while in Arizona 68% of hired workers were employed on large farms with eight or more labourers.¹¹

Seasonal variation in demand for farm wage labour affects not only migrants but all agricultural workers, many of whom have no jobs at all during winter months. Employment of hired farm workers in the United States as a whole has been in January about 30% below the monthly average, and in July and October about 20% above it.¹² In the Pacific Northwest, the area of greatest seasonal variation, employment in January has been 39% below the average and in September 59% above it.

How this variation increases the number of workers required at certain seasons may be seen in the following examples from the West Coast, as described by the Farm Security Administration:

"Records of several large-scale farms show that while 20 acres of hops required only 12 men during the growing season, between 450 and 500 men were required during the harvest. Similar conditions exist in the deciduous fruit crops. On a 2,000-acre peach farm, only 30 regular employees are used while 200 to 250 men are added during the pruning period, 700 are needed for thinning, and 1,000 more added for picking.... Crop production has increased until now more than 100 different crops, harvested with peak labour needs, are marketed in carload lots." ¹³

A crop ranch may need 300 workers at harvest time, the California State Relief Administration has pointed out, while it employs less than 10 regularly throughout the year. Half of the California agricultural workers in 1935 had employment during less than 6.4 months of the year. For migratory workers in the country as a whole, the usual range of employment is from less than five to just over seven months of the year. Including all farm wage labour, the farms reporting hired workers in 1929 averaged only 156 days of hired labour.¹⁴ This indicates extreme irregularity of employment for the great majority of farm wage workers. About 1,300,000 workers who have jobs in the

fields or orchards at the season's peak have no farm wage work in the slowest month of the winter.

Partly because of irregular employment and partly because of lowest wage rates, the average earnings of farm wage workers have been below the earnings of any other groups of workers in the United States. Farm wage rates averaged \$1.23 a day with board and \$1.53 a day without board in April, 1939. Monthly average rates fell from \$44.52 in 1929 to \$21.10 in 1933—less than half the 1929 level. Although the monthly average rate had risen to \$30.03 in 1939, farm wages still "lagged seriously behind many other forms of income." ¹⁵

Behind these averages are the low piece-rates for cutting, topping, stripping, chopping, picking, loading and packing in the fields and orchards of the main farming regions. Here are a few examples of these rates and what they mean in hourly and daily earnings of agricultural workers:

- Cotton picking in Arizona (1937), 85ϕ for 100 pounds; average daily output per picker, 140 to 175 pounds; earnings, from \$1.20 to \$1.50 a day and from about \$6 to \$8 a week.¹⁶
- Cotton picking in California (1938), 75¢ for 100 pounds; children averaged 98¢ a day of 8 hours or more; adults earned from \$1.05 to \$1.80 a day. Union rates, however, were 90¢ for 100 pounds.¹⁷
- Cotton picking in San Joaquin Valley, California (1939), 80¢ for 100 pounds; average daily output per picker, 100 to 200 pounds; earnings, from 80¢ to \$1.60 a day. Workers on strike for \$1.25 per 100 pounds.¹⁸
- Hop picking in Oregon and Washington (1938), $1\frac{1}{4}\phi$ to 2ϕ a pound; average earnings, \$1.82 for adults, \$1.09 a day for children under 16.19
- Prune picking in California (1938), 4ϕ to 8ϕ a box of about 14 quarts. "Hungry dustbowlers offered to harvest prune crops on contract rates that netted only \$1 to \$2 a day for the entire family's work."²⁰
- Sugar cane cutting, topping and stripping in Louisiana (1939), 75¢ a ton; men, \$1.50 per day of 9 hours, or 17¢ per hour; women, \$1.20 per day, or 13¢ per hour; children (14 to 16), \$1.03 per day of 8 hours. These are rates to be paid by producers applying for benefit payments, under Sugar Act of 1937.²¹
- Sugar cane loading in Louisiana (1939), 20¢ a ton; \$1.80 for 9 hours, or 20¢ an hour.²²
- Vegetable and fruit picking in New Jersey (1938), strawberries and raspberries, 2¢ to 3¢ a pint; string beans, 10¢ to 25¢ a hamper; for men,

20¢ to 25¢ an hour; for women, 15¢ to $22\frac{1}{2}$ ¢ an hour; for children, 10¢ an hour.²³

Hired farm workers in the United States averaged, on the land, only \$300 in the year 1938, as compared with \$430 in 1929 and \$212 in 1933. To compare these average annual earnings of farm workers with those of factory workers, Bowden in his study of farm labour uses U. S. Bureau of Agricultural Economics figures, as recently revised. Including board and other perquisites, the average annual wage of hired farm workers was only 33% of the average wage of factory workers in 1929; 25% in 1932; and 27% in 1938. Before the World War, in 1909, the average annual wage of hired farm workers was about half of the average wage of industrial workers in manufacturing. While farm wage labour's average yearly earnings have fallen from 50% to 27% of the factory workers' average, the hours of work in manufacturing have been progressively reduced but working hours of hired farm workers have remained about the same as they were 30 years ago.

For migrants, yearly earnings are lower than for other farm workers. "It may be estimated that the earnings of migrant agricultural families are equivalent to a wage of only about \$200 per worker, and that they provide maintenance of less than \$100 per year for each member of the average migrant family." ²⁴ Average family earnings fell from \$381 in 1930 to \$289 in 1935, the California State Relief Administration reported.

On such yearly earnings as these, no family anywhere in the United States can possibly have even the so-called minimum standard of "health and decency." The average earnings of migratory workers in California are not even half enough for minimum family needs, according to the State Relief Administration which estimated that each family, in 1935, should have had at least \$780 to eke out an existence.²⁵ The great majority of agricultural workers have not been making even enough for family necessaries during the summer period of employment, to say nothing of winter months without work. In the summer of 1937, during the height of the harvest season, 6,000 migratory workers applied for relief in the San Joaquin Valley district of California.

When the Farm Security Administration provided small homes

near labour camps in California, to rent at a cost of only \$8.20 a month, it found that "even this low rental is beyond the ability to pay of the majority of migrant families, but some of the more fortunate can meet the rental." ²⁶ The "homes" of countless migratory workers were described in 1936 as follows:

"Old tents, gunny sacks, dry-goods boxes and scrap tin. These are the material from which the dwellings are constructed. All the shacks visited were without floors.... There were no sanitary facilities in evidence and the backyard has been used as a toilet. An irrigation ditch half-filled with muddy water has been used for all purposes."²⁷

Records of the federal camp managers show that no aspect pleases the camp residents more than the sanitary toilets and shower baths. Some few of the large growers provide good housing facilities for seasonal workers, but very few. Too often the shacks in which workers must live are without any conveniences of any kind. Excessive heat in summer means a sharp increase in the child mortality, largely the result of drinking bad water and living under crowded and insanitary conditions. Winter brings an increase in cases of pneumonia, influenza and other pulmonary diseases.

Other large-scale farming regions are not much better in the provision made for seasonal workers.

"Arizona cotton pickers' camps conform to the standard rural-slum pattern of Western migratory workers' camps. The usual run of Arizona camps consists of a crowded, filthy, makeshift collection of shelters. Although some of the camps house as many as 1,000 people during the picking season, even elementary sanitary provisions are frequently lacking."²⁸

New Jersey truck farms, now thoroughly industrialised and many of them held by corporations, provide the same kind of shacks for their workers. The National Child Labour Committee in its 1938 survey of New Jersey truck farming found countless houses "unfit for human habitation." Overcrowding was the rule; sheds, barn, garages and chicken coops were used as houses to shelter the families. Toilet facilities were "generally bad, and in some localities a disgrace."²⁹ In Montgomery County, Maryland, a 1939 survey by housing authorities found rural slums where 94% of the houses had no interior toilets and no bathing facilities of any kind. The nearest water supply was often half a mile away.³⁰

Legislative measures to better such living and working conditions as these have been conspicuously lacking in most states and in the United States as a whole. Agricultural workers are for the most part unprotected by workmen's compensation laws, safety regulations, and all other social legislation. They are specifically excluded from the federal Social Security Act, the National Labour Relations Act and the Fair Labour Standards Act of 1938.

Resistance Develops

Intense bitterness on the part of agricultural workers against bad living and working conditions has broken out from time to time in spontaneous struggles, some of them recorded as strikes of historic importance. Almost every strike of farm labour has been suppressed with violence by farm industrialists, banded together in vigilante groups and more recently organised as the Associated Farmers in California and other states. Most of these strikes have included as a major demand an increase in wage rates.

Among the earlier struggles of farm workers, the Wheatland "riot" of August, 1913, was outstanding. The Industrial Workers of the World, although they had organised less than 8% of the migratory farm workers of California in 1913, were able to lead thousands of workers in militant demonstrations "on the job." On the Durst hop ranch at Wheatland, California, August 3, 1913, some 2,800 men, women and children were living in tents, rented from Durst at 75 cents a week. Durst had purposely advertised for more workers than he needed in order to keep wages down, it was reported by an investigating commission.

No more than 100 of these workers were members of the IWW. But all were deeply resentful over living and working conditions which herded them together, without water or sanitary conveniences, in heat of 105 degrees. Disease was mowing them down. Work in the fields began at 4 o'clock in the morning and lasted till after sundown; earnings varied from 78 cents to \$1 a day.

Following a mass meeting addressed by IWW organiser Blackie

Ford, the workers were attacked by deputy sheriffs who fired a shot "to sober the mob." Two workers, the district attorney and a deputy sheriff were killed, and a reign of terror against the workers was instituted in the county. Four companies of the National Guard were ordered to Wheatland; a hundred workers were arrested; the Burns detective agency was called in; Wobblies were arrested all over the state and tortured in prison; Ford and Suhr, another IWW organiser who had not been present at Wheatland, were convicted of murder and sentenced to life imprisonment.

The "most energetic group in the IWW," the Agricultural Workers Industrial Union, was organised in April, 1915, and reported from 18,000 to 20,000 members in 1916.³¹ It conducted a strike of farm labourers at Turlock, California, in June, 1917 (when vigilante groups of local growers drove the organisers out of the region) and an important cannery workers' strike at San Jose, California, in August, 1917. Following the raids on IWW headquarters in the autumn of 1917, the farm workers' union was broken up.

The year 1919 saw orange pickers on strike in southern California, in January, and farm labourers on strike at Pomona, La Verne, and Ventura, California, in April. Not until the period 1929-1935, however, did agricultural strikes become of major importance in the United States. Spontaneous struggles developed in the Imperial Valley, California, in January and again in February, 1930, when Mexican and Filipino vegetable and fruit pickers were joined by American workers from the packing sheds in a strike against wage cuts. During the strikes, organisers of the Trade Union Unity League entered the Valley and organised the Agricultural Workers Industrial League. Their activities were met with violence, arrests and court cases which sent eight to prison under the "Criminal Syndicalism Act."

Out of these earlier efforts grew the Cannery and Agricultural Workers Industrial Union, organised in 1931, which led a number of strikes during the following year, notably the struggle of 400 fruit workers at Vacaville, California, in November, 1932. Masked vigilantes kidnapped strike leaders, beat them and poured red enamel over them, but the strikers held out, with the statement: "We would have to starve working so we decided to starve striking."

In California alone in 1933 there were 37 agricultural strikes, in-

volving 47,575 workers and affecting cotton, berries, cherries, peas and other vegetables.³² These strikes were mainly for wages higher than the low prevailing rate of 15¢ per hour, but demands also included recognition of the union, abolition of the contract system, and changes in bad working conditions. Of these strikes, 20 were led by the Cannery and Agricultural Workers Industrial Union which scored gains in 16 of them.

Again extreme terror was used against strikers. Vigilante committees of business men, Ku Klux Klan, Chamber of Commerce, local, state and federal authorities, all combined in an effort to crush the strikes. In the lower San Joaquin Valley, for example, in the October strike of 18,000 cotton pickers, three strikers were murdered; 42 were wounded; and 113 were arrested; but the strike lasted 27 days and brought a 25% wage increase.

For the United States as a whole in the year 1934, incomplete reports by the U. S. Bureau of Labor Statistics showed 22 strikes involving 24,000 agricultural workers. Imperial Valley lettuce and vegetable pickers were again on strike in January, 1934, when 5,000 came out and were met by concerted terror and violence. In the same valley, pea pickers struck in February, 1934, and were attacked by state authorities and ranch owners.

On Seabrook Farms, Seabrook, New Jersey, in April, 1934, over 1,000 fruit and vegetable workers went on strike and succeeded in raising wages from 12^{e} - 15^{e} to 25^{e} - 30^{e} an hour. Led by what became Agricultural Workers Union 19996 (AFL), the workers struck again in June when Seabrook tried to go back to the old wage scale. The cut was defeated but rich farmers in the neighbourhood organised vigilante bands to help Seabrook and terrorise strikers. Union leaders were arrested and 60 strikers were injured in one day's attack on the picket line. But the union had the support of small farmers and of many small business men in the community.

Another important strike occurred in June, 1934, in Hardin County, Ohio, where 800 onion pickers demanded wage increases that would give them 25° an hour. For working in hot, dry muck, adults had been getting from 8° to $12^{1/2}^{\circ}$ an hour; the smaller children only 4° an hour. Agricultural Workers Union Local 19724 led the strike and won increases which gave the pickers 15° to 20° an hour. Corporations owning the land mobilised vigilantes who kidnapped and beat union men, while state authorities obligingly arrested the union leaders.

Over 13,000 farm workers were on strike in 1935 in a dozen struggles, including 1,500 fruit and vegetable workers of El Centro, California; 2,000 onion field workers in Laredo, Texas; 1,500 pea pickers of Driggs, Idaho; 3,000 cotton pickers in Alabama; and 4,000 cotton pickers of eastern Arkansas. In 1936, incomplete records show strikes of 2,500 cotton choppers in eastern Arkansas; 2,750 orange pickers in Santa Ana, California; and 3,000 fruit and vegetable workers in Salinas, California.

Union organisation among farm workers had been steadily gaining strength so that by March, 1934, the Cannery and Agricultural Workers Industrial Union reported over 20,000 members (including both cannery and farm labour), a 100% increase in one year. In Florida, in 1934, the Citrus Workers Union (unaffiliated at that time) reported 35,000 members, about 20% of them Negroes. By the autumn of 1935, there were over 150 farm workers' unions spread over 30 states—the great majority of them federal locals of the AFL and most of these chartered since the beginning of 1934.

A National Committee for Unity of Agricultural and Rural Workers was established in January, 1935, started its own paper, *The Rural Worker*, during the year and reported significant progress to the 1935 AFL convention. A National Beet Workers Committee, organised in 1935 to represent 35,000 beet workers in Colorado, Wyoming, Nebraska and Montana, made plans for drawing all local unions into one national body. By 1936, there were 62 federal locals (AFL) among farm and cannery workers throughout the country, but AFL officials repeatedly refused them a charter to form a national union. Delegates representing 56 of these locals in 24 states met in Denver, Colorado, July, 1937, and formed the United Cannery, Agricultural, Packing and Allied Workers of America, affiliated from its beginning with the CIO, now the Congress of Industrial Organisations.

The membership of this union, which had grown to about 100,000 in 283 locals by October, 1939, includes not only field workers but workers in canneries and other processing plants. It has achieved greater stability among the processing workers than among those in farm work proper, but the union is widely trusted by the farm workers and has helped in most of their recent struggles. It has signed contracts with 200 firms covering some 17,500 workers. Its achievements in the face of violence and terror used against its organisers form one of the brilliant records of American labour history. Its publication, *Ucapawa News*, is issued monthly from its headquarters in Washington, D. C.

Since the organisation of a responsible national union to represent farm workers there have been fewer strikes, but those that have occurred have usually been successful in defeating wage cuts or in gaining increased wage rates. In February, 1938, some 6,000 pecan shellers in San Antonio, Texas, were on strike for six weeks against a 20% wage cut; one-half the wage cut was withdrawn and the workers won a union weigher of nuts and greatly improved conditions. Over 1,500 pea pickers at Sacramento, California, in May, 1938, won a signed contract and wage increases.

A sit-down strike of cotton pickers in Oklahoma, Missouri and Arkansas in September, 1938, won wage increases of 10° to 15° a 100 pounds when planters finally granted a basic rate of \$1. Led by the Southern Tenant Farmers Union, then affiliated with UCAPAWA, the strike was successful but in Arkansas the Negro union leaders were framed up and sent to prison for distributing leaflets during the strike.*

On the Earl Fruit Co. ranches, Marysville, California, over 250 fruit pickers were on strike in May and again in July and August, 1939, to maintain a 5° hourly wage increase. The strikers at first unorganised were later led by UCAPAWA. The company is a subsidiary of the Di Giorgio Fruit Corp., one of the largest fresh fruit growing and marketing firms in the world, owning over 26,000 acres in five states and controlling about 40 smaller companies. Its president, Joseph Di Giorgio, is active in the Associated Farmers. Ninety-seven arrests of strikers were made in less than a month and a 6-month prison sentence was given strike leaders accused of violating the Yuba county anti-picketing law.

So also in the 1939 strike of cotton pickers in the San Joaquin Valley, California, Associated Farmers used their familiar tactics of vio-

^{*} In 1939 the leadership of the Southern Tenant Farmers Union broke with the United Cannery, Agricultural, Packing and Allied Workers of America, but the bulk of the active membership left the STFU and remained with UCAPAWA.

lence and intimidation. Some fifteen thousand cotton pickers went on strike early in October for \$1.25 per hundred pounds as against 80¢ fixed by the growers. A mob of vigilantes mobilised by the big growers raided strike headquarters in Madera; attacked a peaceful strikers' meeting in the public park on October 21 with chains, bats, billy clubs, pick handles and rubber hoses; broke it up with the aid of the Highway Patrol and its tear-gas shells; and arrested 23 strikers. But over 1,200 cotton pickers joined the UCAPAWA and some of the growers settled on a compromise rate of \$1 for 100 pounds of cotton.

At the hearings of the LaFollette Committee (Senate committee investigating violations of civil liberties) in December, 1939, witnesses reported that there had been 183 strikes in California agriculture between 1933 and 1939. In 65 of these strikes violence had been used against the pickets.

Who are these Associated Farmers who come out in every strike to break the heads of farm workers because they dare to join a union and ask for a few cents more in wages? Organised at first as a voluntary association in 1933 in California's Imperial Valley, "cradle of vigilantism," the Associated Farmers promised to help one another "as special deputies in the event of disorders arising out of picketing and sabotage." Following its first statewide convention in May, 1934, the organisation was financed by initial contributions including \$1,250 from the Pacific Gas & Electric Co., \$2,500 from the Southern Pacific Railroad, \$1,500 from the Atchison, Topeka & Santa Fe Railroad, and other gifts from the California Packing Co., American Can Co., and the San Francisco Industrial Association. Its largest contributions have come from railroads, utilities, sugar companies and other industrial corporations, as shown in the December, 1939, hearings before the LaFollette Committee.

In addition to these corporations, the Associated Farmers includes the Di Giorgio Co., described above; the Kern County Land Co.; Transamerica Corp. and its subsidiary, California Lands; M. James Irvine Co.; Hotchkiss Co. with its vast cotton "plantations"; and a dozen others known as the largest farm industrialists in California. An excellent study of the organisation by the Simon J. Lubin Society, *Who Are the Associated Farmers?* ³³ shows that 2% of the farmers in California own 25% of the farm acreage, pay 36% of all wages for hired labour and receive 32% of the total crop value. The Associated Farmers are the front for that 2%. But they are not confined to California.

By 1939 the Associated Farmers were claiming over 100,000 members in 15 states, including Washington, Oregon and Arizona. They have lined up many of the "middle" farmers who are impressed by their size and importance, but their membership always includes the richest and largest group of farm capitalists at the top. The organisation is of the utmost significance because it illustrates the completely capitalist nature of large-scale farming; because it represents the interests of finance capital in agriculture; and because it has taken the lead in an aggressive type of fascist action in the United States.

Why Farm Wages Are Lowest

Why has the treatment of farm labour been so extremely brutal? And why have the big interests in California been so determined to extend their fascist organisation, the Associated Farmers, among the "middle" farmers throughout the country?

Three factors have combined to push down the wage-scale for farm workers.

First, the pressure of rent and land prices. These are present, of course, in all business reckoning in the capitalist world. But they play a far more important rôle in relation to business profits in farming than in most industrial activities. When farm profits are moving downward, land prices usually drop more slowly than the farmers' gross returns. The farm employer—like any capitalist, large or small—tries to save himself by increasing exploitation of any workers he may employ. In California, rent has always pressed most heavily, since the monopoly forces have been able from the beginning to maintain exceptionally high land prices.³⁴

No capitalist takes responsibility for what happens to his workers when he does not need their labour power. The fact that farm work is seasonal—well, as the bosses say, "That is their hard luck." Or if the work is steady throughout the year, the boss falls back on his shabby myth about the "perquisites" his hired help receive. Such attitudes the employing farmer shares with the whole capitalist class. Peculiar to agriculture is the driving pressure of rent and the cost of land from which the farm employer seeks to free himself by increasing the value taken from his wage workers.

Second, the background of the workers themselves. They have been drawn increasingly from those who have known extreme poverty as farmers. Whether foreign-born, or native white, or Negro, they have mostly had no experience of a moderately decent scale of wages. As poor farmers, they have handled very little cash and have had on the whole a lower standard of living than industrial wage workers have learned to expect. Those who have knocked about as casual labourers have had only the lowest wages and the most irregular employment that American industry can impose. So these masses of farm workers have entered farm employment with less exacting standards for cash income or standard of living than the averages prevailing in towns and cities. With the growth of mass unemployment since the latter 1920's, the large farmers have been able further to depress the scale of pay and to disregard all standards of decent housing. For the dread of total unemployment and starvation has brought into the special areas of seasonal farm labour a large anxious reserve of hungry families.

Third, the difficulty of labour organisation and the lack of union standards. Spontaneous resistance to inhuman conditions is only now shaping into some sort of strong and stable union life. Where farm workers have been well-rooted and permanent, they have also been too thinly scattered for organisation. And where large groups suffer together they form a rapidly shifting mass, each going his way at the end of the season and never again united.

Now that the workers are proving they can carry on a well-ordered and heroic struggle for better conditions on "factory farms," the big capitalists recognise that they need the "dirt" farmers as allies on their side of the class war. For the big employers are still relatively few in the world of agriculture. To win the "dirt" farmers they dare not admit who these leaders of the Associated Farmers really are. They must soft-pedal the sharp conflict, within California, between the great farm corporations and the "dirt" farmers who try to compete with them. They must conceal the true conditions which the organised farm workers are trying to improve. For while the "dirt" farmer is under tremendous pressure and also pays for his hired help less than a fair city wage, he is far from being akin to the wealthy men who head up the Associated Farmers. The "dirt" farmer is correctly inclined to distrust finance capitalists. He has himself suffered from their highly developed technique of exploiting all who do productive labour. And he has some understanding of the fact that his own market has been limited by the poverty of the working class. Whether "dirt" farmers will play the game of the fascist-minded big employers or will resist their distorted appeals and line up with the working class in the struggle against finance capital, is one of the most momentous questions of the present day.

CHAPTER VII

Small Farmers Crowded Out

SECRETARY WALLACE has compared the plight of the poorest "one-third" of American farmers with the worst poverty of European peasants. The "two million" farmers to whom Secretary Wallace referred correspond roughly with those who had gross incomes below \$600 in 1929, together with workers who returned to the land during the crisis and increased the numbers of very poor farmers.¹

The problem of small farming involves not merely two million families but three million or more. In 1929 all those with gross income under \$1,000 were poor; the upper group with more than \$600 a shade better off than the most destitute, but still struggling against terrific odds to make a living from the land. Half the farmers in the country were small and poor farmers in 1930. And their number has greatly increased during more recent years.

Gross farm income figures are the only figures given by the census for the entire country and all types of farming. They overstate the amounts available for family living since gross income represents the total product of the farm (whether for sale or for use by the family) before deducting any of the necessary farm expenses. Sharecroppers, for example, have for their own use only half of the total cash income from the sale of cotton or tobacco. They may have in addition some food raised on the cropper farm, but this is a small amount and is usually more than balanced by the high prices and interest charged at the store which makes advances while they are working on the crop. For sharecroppers, therefore, a "gross income" of \$600 to \$1,000 means, roughly, a family income of \$300 to \$500, and a "gross income" under \$600 means a family income of less than \$300. For other poor farmers the ratio of farm expenses to gross income would be, usually, somewhat smaller, but some expenses for carrying on the farm are always necessary, even on the poorest farms. Gross income represents the general scale of farm operation, and family income is always smaller than the gross income figure.

These three million poor farmers were a diverse group and the victims of several different trends, each of which must be understood before we can see the picture of farm poverty as a whole.

Tenancy

Sharecropper tenancy is obviously and without question a vicious form of land tenure, covering extreme exploitation of those who work the soil and in itself creating and perpetuating poverty. (This was discussed in Chapters III and V.) It plays a large rôle in the southern problem. It holds down the living standards of the sharecropper families and serves as a drag pulling down also the wage scales throughout the South. Sharecropping not only leaves the croppers themselves at the edge of destitution, but narrows disastrously the market for food products which might be raised on southern farms.

In all sections of the country excessive rent and insecurity of tenure weigh heavily on middle farmers and make poor farmers poorer. But as we saw in a previous chapter, tenancy in the North and West covers a wide range of situations. Tenants other than sharecroppers include all income groups from the well-to-do to the very poor, while some of the poorest farmers own their land clear of mortgage. Of course it is obvious that the smaller the farmer's total income, the more his own subsistence is dragged down by the payment of rent or interest on mortgage debt.

It is the small tenants who are most acutely aware of direct exploitation by the landlord. Their resentment led in the spring of 1931 to organisation of the Sharecroppers' Union. This warning of resistance to exploitation brought from the landlords a succession of savage attacks, involving the murder of Ralph Gray, one of the sharecropper leaders.²

Poor Soil

Most of the areas of special distress where poor soil appears to be the ruling factor in farm poverty show the consequences of past misuse of the land. Of course there were always natural differences in fertility and location but these have been greatly intensified during the past hundred years.

In the earlier years, when there was no surplus of grain or cotton, farmers on the poorest land could at least expect a fair return for such products as they raised for sale. But with the chronic surplus in farm products, piling up beyond effective market demand, farmers struggling with poor soil cannot cover their costs and obtain decent living. This statement is true in spite of the broad underlying principle that prices in a free, competitive market are determined by the costs on land of the poorest quality. To-day, it is especially important to understand the qualifications inherent in this underlying principle.

First, the land determining prices of farm products is the poorest land which must remain in production or be brought into production in order to satisfy the needs of the market. It is not the poorest land actually in use in a period of continuing surplus production beyond market demand. Lenin, for example, in condemning "average productivity" as an incorrect basis for grain prices, stated it this way:

"This limitation [of land], quite apart from *property* in land, creates a certain kind of monopoly, i.e., since all the land is occupied by farmers, and since there is a demand for the whole of the grain produced on the whole of the land, including the worst land and that most remote from the market, then it is clear that the price of grain is determined by the price of production on the worst land (or the price of production with the last and least productive investment of capital)." ⁸

Second, this principle assumes that the farmer is free to take his capital elsewhere if the prices received fail to cover the cost plus profit on the poorest land. With the difficulties which face to-day those farmers who try to shift to some other occupation, this freedom to take his capital elsewhere is very limited, almost non-existent. Farmers having no alternative continue to produce on very poor land. And when they thus add to a surplus beyond market demand, the price tends to fall, not only below their costs on the very poorest land but even below the cost plus profit on such poor land as is genuinely required for meeting effective market demand.

Third, the determining price of production, on the poorest land required to satisfy market demand for the product, is a price which assumes the use on that poorest land of *average* technical equipment. For in relation to the very wide differences in cost resulting from differences in technique of production, agriculture is not essentially different from industry. There is no natural and impassable barrier to the universal application of technique by which cost is reduced. This factor in price of production operates on the basis of *average* cost. The effective price of production (effective if prices were not pushed still lower by monopoly) would reflect the costs when average technique is applied to the poorest soils whose cultivation is necessary for satisfying market demand.

About half a million farms on poor land should be entirely withdrawn from agriculture, in the opinion of land-planning and agricultural experts.⁴ Very many of these farms on "submarginal" land are almost entirely out of commercial farming and, at the same time, are unable to raise an adequate food supply for the family. Probably half of the poorest land now in farms is included in these half million, but the land planning experts assume that some land no better in its physical properties "can profitably remain in cultivation" because it benefits from "favorable geographic location." They also assume that "a good many farmers on grade four land can profitably remain on farms incapable of providing them with a living because of the possibility of part-time employment off the farm."⁵

Conditions vary in the different regions.

Farms in the southern highlands have always been small and remote from the main stream of American life. Commercial farming has been slow in developing and some handicrafts of the pre-industrial world have lingered on. To-day many of these farmers are stranded without possibility of employment. Their soil is exhausted from long cultivation without use of fertilisers, and the hillside acres have lost much of their top soil. Farm experts distinguish between exhaustion of soil, when the chemicals necessary to vigorous plant life have been withdrawn by overcultivation, and soil erosion, when the basic top soil itself, formed through millions of years from decaying organic matter, has been washed or blown away. Both loss of vital elements and loss of top soil are widespread in the southern highlands.

In the lower hills of the Southeast also, where good land of a century ago has been uncovered to rain and wind in fields used steadily for cotton, corn and tobacco, loss of top soil has reached serious proportions in some places. We have all seen pictures of old plantation mansions standing in the midst of bare, deeply gullied acres and occupied by gaunt and ragged tenants.

Over half of the destitute farmers on submarginal land which the experts say should be withdrawn from cultivation are in the southern highlands and the old cotton belt of the Southeast.⁵

Like the southern highlands remote from commercial farming are the recently settled cut-over regions along the Great Lakes, near the Gulf of Mexico, and in the Pacific Northwest. Here the timber kings have had their day and passed on, leaving stumps and waste. Wage workers who bought a patch of land for subsistence farming while they worked in the forests are stranded without employment. Other settlers have followed, lured by the cheap acreage and hoping to make a living on farms. But the cut-over land is encumbered with special problems. To clear it has involved tremendous labour, and much of the soil adapted to forest growth has proved unsuited to agriculture. Settlers have been widely dispersed and even on the patches of fairly good land commercial farming has been handicapped by isolation and the lack of nearby markets.

The Great Lakes region, the largest area of cut-over land under cultivation, has some 27,500 farms reckoned by the Land Planning Committee as hopelessly submarginal. On all the cut-over regions together the number of such farms climbs to 71,000 according to the estimates of this committee.

Somewhat different is the problem of farmers on submarginal land in the Great Plains. Here (as we noted in Chapter III) the native grass cover of the dry prairies was destroyed by unregulated and excessive grazing and by the ploughing up of good grazing land for wheat. Also, control of springs and natural pools was completely individualistic, and those who had a fair supply of water used it without thought of conservation. For years, agricultural experts have set forth the importance of alternating grain years with intermediate

years of legumes that hold the soil and restore some of its chemical values. But the pressure for large cash crops has been stronger than this call to conserve the soil. Poor farmers struggling to make a living on too small an acreage could not hold out of cultivation half or two-thirds of their crop land each year.

Then the drought of 1929, 1934, 1936 and 1937 brought disaster. Underground water levels have dropped throughout the region. Much of the top soil has been blown away on areas which appear on the soil maps in great irregular patches from Montana and the Dakotas to southwestern Texas. Most serious is the condition of the Dust Bowl (parts of Kansas, Colorado, New Mexico, Oklahoma and Texas) where black blizzards have swept away tons of soil and left farm buildings buried in piles of sand.

Nearly half the acreage on which farming should be abandoned lies in the western dry lands. Here the Land Planning Committee reckoned in 1935 that some 36,000,000 acres, occupied by some 46,000 farmers, should be withdrawn from agriculture. Since the great drought of 1936 tens of thousands of farm families have left the plains, abandoning their farms without constructive aid from the government and swelling the ranks of destitute migrants seeking employment. We do not venture to guess how many of the much greater numbers who remain on farms in the prairie states, existing with federal relief work and federal loans for feed and seed, would now be reckoned as occupying hopelessly submarginal land.

Since 1936, the federal government has at last begun more seriously to deal with the problem of soil and water in the dry prairies. But it expects the farmers themselves to carry out certain practices which the poorly equipped, with no margin of acreage, find it difficult if not impossible to apply.

Small Acreage

Insufficient acreage is in itself a cause of farm poverty. Obviously the man whose farm is too small to keep him fully occupied cannot dream of making a living even from the best kind of land. This is most markedly true for the specialised crop farmer who faces idle winter months when he cannot be producing any value. But the problem is more complex than a mere question of acreage.

The small farmer may be fully occupied in cultivating good land and still find that the return for his labour fails to supply the necessaries of life. For if acreage is too small to use labour-saving tools and equipment the farmer's labour faces hopeless competition with the more productive labour of farmers who are better equipped. Except on cotton farms and southern tobacco farms, the small farmer makes a negligible contribution to the total commercial output. Even on cotton farms, with the world surplus beyond current demand for cotton, the output of the smallest farms could be withdrawn from the market without creating scarcity. Long hours of hand labour on backward small farms cannot set the prices of farm products.

We have no hard-and-fast guide to the dividing line between farms with small acreage and medium-sized farms. The whole question merges into the broader question of acreage adapted to modern equipment, and related variations in the cost and quality of the product.

But we can make a rough comparison between acreage and gross farm income. For it may fairly be assumed that within each type of farming the farms with the smallest acreage are also usually the farms with the lowest incomes, and those with the largest acreage are also the farms with the largest incomes. So, for example, 29,950 truck farms had gross incomes below \$1,000 in 1929, and 7,094 had gross incomes of \$6,000 or more. Comparing these numbers with the acreage groupings, we find that 29,633 truck farms had less than 20 acres; 13,593 truck farms had over 100 acres, and of these 4,856 had over 174 acres. So we may assume that a \$1,000 gross income from truck farming commonly required at least a 20-acre farm, and a \$6,000 gross income required a farm of something over 100 acres.

In cash-grain farming, of course, the acreage required for these income levels was considerably larger. The number with less than 100 acres (61,465) was smaller by over twenty thousand than the number (82,241) reporting less than \$1,000 gross income. The next acreage group (100 to 174 acres) with its 116,503 farms could have included all the rest of the under-\$1,000 farms along with a much larger number with a slightly higher income. At the upper end, there were 22,495 with 1,000 acres or more and 61,619 with 500 to 999 acres, as

compared with 37,602 who reported over \$6,000 of gross income. It appears that the \$6,000 income was not commonly produced on farms with less than 500 acres but certainly was produced on many of those with less than 1,000 acres.

A similar comparison for each type of commercial farm gives the basis for the following table. This suggests that it would be most exceptional for a fruit farm to have achieved \$1,000 of gross income in 1929 with less than 10 acres. Such an income would have been very exceptional for a poultry farm or a truck farm of less than 20 acres; for a crop-specialty, dairy, animal-specialty, cotton, or general farm of less than 50 acres; for a cash-grain farm of less than 100 acres or a stock ranch of less than 260 acres.

FARM ACREAGE AND GROSS FARM INCOME: 1929 *

	Acreage group in which probably fell in 1929			
	Upper limit of farms with	limit of Lower limit of s with farms with \$6,000		
Type of commercial farm	under \$1,000	or more		
Fruit	10 to 19	100 to 174		
Poultry	20 to 49	175 to 250		
Truck	20 to 49	100 to 174		
Crop-specialty, dairy, animal-specialty	50 to 99	260 to 100		
Cotton, general	50 to 99	500 to 000		
Cash-grain	100 to 174	500 to 000		
Stock ranch	260 to 499	1,000 to 4,999		

In 1930, poultry, fruit and truck farms, the only types which clearly reported more than \$1,000 of gross income with less than 50 acres of land, were only 11% of the 2,196,669 farms having such small acreage. And it was precisely the farms with very small acreage which increased

*Exact correlation of acreage and income cannot be derived from the census data. The table shows for each type of commercial farm the acreage groups within which probably fell the upper limit of the poor farms (under \$1,000 in 1929) and the lower limit of the well-to-do farms (\$6,000 and over) provided income and acreage varied exactly with one another. Such exact relation is disturbed by differences in soil productivity and differences in the percentage of the farm's total acreage actually in use. But there is unquestionably a rough direct relation between acreage and gross farm income within each given type of farming. And the differences among the several types are noteworthy.

in number most markedly between 1930 and 1935, until nearly onefifth (18.4%) of all farms in the United States reported less than 20 acres of land and two-fifths (39.5%) reported less than 50 acres of land.

Small Farms vs. Modern Technique

Small farmers are hit by increasing mechanisation and improved technique in two different ways. Some are literally driven off the land. Others remain on the land and find themselves in hopeless competition with larger producers. Neither process is new, but the small farmers' problems have become more and more acute. When they or their children leave the land, they now find no promising outlets in non-farm occupations. (We have seen what they have to endure as wage workers on other farms.) On their own farms they must continue to raise some farm products for sale, but they are contributing a surplus beyond market demand, which cannot be sold at prices high enough to give them a decent living.

Wherever the small farmer occupies fairly good land, he is likely to be under direct pressure from more prosperous neighbours. For at every stage of development the comfortable farmers who are keeping up with the times in their equipment tend to expand their scale of operation. Usually this involves acquiring additional acreage. The small neighbour who owns his farm clear of mortgage and pays his taxes is not easily displaced—unless he chooses to sell out. But the small tenant is pried loose to meet the needs of the expanding farmer. The larger farmer wants more acreage. And he may want also more hired hands. Or as a staff correspondent of the *Wall Street Journal* put it (July 13, 1938) in a story from Springfield, Ill.:

"Local observers point out that once a farmer has bought a tractor and mechanical equipment for harvesting his crops he frequently feels that he could handle additional land and acquires more acreage. 'You don't have to look up the statistics,' one farm bureau man said, 'you can just see it happening. They've made chicken coops out of a lot of tenant houses.'"

With some 600,000 new tractors added to the equipment of American farms during the years from 1930 to 1938, it is obvious that such expansion of individual farms, taking over land operated by small farmers, must have been fairly widespread. Tractor farming has in-

WHY FARMERS ARE POOR

creased since 1930 relatively more in the cotton belt than in other states having much higher percentages of tractor farms at the close of the 1920's.*

TRACTORS ON FARMS: 1920, 1930 AND 1938

	10 cotton states	All other states
1920	29,075	217,008
1930	111,839	808,182
1938	237,588	1,290,401

This has been most conspicuously a recent factor in deepening the crisis among small farmers in the cotton country. Especially in the central cotton regions with rich and fairly level land, semi-mechanised cotton culture, requiring hand labour only for the picking, has been on the upgrade since the crisis. In buying a tractor the landlord throws his tenants' land into larger units and sweeps off into cities and villages destitute families who were yesterday poor croppers and small farmers. Their labour is still needed at the picking season, when they are brought out daily to the fields as wage workers, but this short season of employment gives them a smaller return than their miserable cropper's half. And even such work is made doubly uncertain by restriction of cotton acreage and the threat of the mechanised cotton picker.⁶

For the sharecroppers and other small cotton farmers remaining on the land, this advance in semi-mechanised cotton culture is also a serious matter. Without waiting for the perfected mechanised picker the volume of low-cost production is increasing and threatens to depress still further their poverty level of existence. For the cost of raising cotton (apart from picking) varies on land of a given quality from \$11.53 per acre with half-row equipment and one mule—commonly used by sharecroppers—down to \$4.71 per acre with 4-row equipment drawn by a tractor. Even the two-horse one-row cultivator (walking), which is more efficient than the one-mule half-row cultivator, leaves

^{*}General purpose tractors, swung high enough to straddle safely a row of young cotton plants, were successfully developed in 1924, over ten years later than the low heavy tractors first offered for ploughing and for reaping small grains and hay. Extent of tractor farming in the cotton states has not yet overtaken that in other farm areas. The 1938 figures are estimates from *Farm Implement News*, April 7, 1938.

the total pre-picking costs almost twice as high as the costs with tractor.⁷

Small farmers raising other products for sale are faced with several different kinds of difficulties. In raising perishable products which reach the consumer without processing, very small farmers are commonly thrown back on local markets, and even here the smallest farmer is at a disadvantage. He has no telephone, and he may be tucked away on a back road, so he loses sales to those who can be reached more conveniently. Even if he has a horse and wagon, he must peddle to a more restricted circle than his neighbour can reach with an old car.

Or take the question of quality. This becomes a more serious problem for those who try to reach a market beyond their neighbourhood.* Milk for cities and towns must come up to standards which require certain routine in the care of cows and utensils, and ability to deliver to the nearest collection point or creamery at a stated temperature. The farmer without facilities for abundant hot water, sterilising equipment, and refrigeration finds it impossible to meet the requirements. And if two or three cows in a herd of ten fails to meet the health tests, a small farmer may be ruined entirely.

To produce vegetables or fruit that will stand a chance in the city market the farmer must have good seed and plenty of fertiliser. He must have at hand a variety of sprays to deal with all possible pests. For perishables he must be able to time perfectly the picking and shipping.

Even the common Irish potato responds to a most exacting schedule of treatment which has raised the standards of quality. This involves among other things:

Ploughing at the right time, and careful preparation of the seed-bed.

Healthy seed potatoes and cuttings of exactly the right size.

Exact placing of the fertiliser in relation to the potato seed.

Control of pests, involving soil tests and possible treatments to give correct acidity; rotation of potato crop with clover or some other legume; dipping of potato seed before planting; repeated treatment of growing plants with different dusts and sprays.

After harvesting, storage in humid atmosphere at stated temperature, which

* On cotton, see Chapter IX.

should vary according to the period of storage and the use for which the potatoes will be offered.⁸

Other illustrations of technical advances that can be applied only on fairly large farms are given by the National Resources Committee.

"Transplanting machinery is eliminating one of the hardest backbreaking duties on truck farms.... It places truckers in a position to set out plants when they are the proper size and does away with the necessity of waiting for favourable weather conditions. Every plant is watered at the time it is set, thus assuring a good stand and a quick start.... Excellent results have been obtained from spray irrigation applied immediately after crops are transplanted.

"In certain sections central spray plants are being installed in orchards, equipped with large mixing tanks, pumps, and electric motors or engines, and with the distribution pipes supported on the trees....

"One of the important fields to which electrical energy is being applied is irrigation.... It now appears that one of the largest potential uses of electricity in agriculture is soil heating in hot beds and soil sterilisation in greenhouses." ⁹

Production per acre is increased by the same measures that raise the quality of the product. Disadvantages of low yield per acre coincide with the other difficulties of the small producer. This also may be illustrated by the potato. Average yield on the more than three million farms raising potatoes in 1934 was 112.6 bushels per acre. Certain leading potato regions had higher average yield, but within each region, as in the country as a whole, the large producers had markedly higher output per acre than the small producers. Counting out the 1,400,000 farms reporting less than 20 bushels of total output—which had everywhere the lowest yield per acre—we find the following differences between the smallest commercial producers and the large growers.

Dairy herds show similar differences in the yield of small herds and large herds. The average quantity of milk and of butterfat per cow rises in direct relation to the size of the herd, from 3,435 pounds of milk and 145 pounds of butterfat on farms with two or three cows to 5,810 pounds of milk and 228 pounds of butterfat on farms with 50 or more cows.¹⁰ This reflects variations in breeds of cattle, in the routine of freshening the cows and caring for their calves, and in the use of special feeds.* It has also been established that the yield of individual cows varies with differences in temperature and barn conditions.

In actual practice, higher average yields (whether of milk per cow or crops per acre) have usually gone along with changes reducing the amount of direct human labour required per unit of product. More phases of crop cultivation or care of livestock are given attention on

AVERAGE YIELD OF POTATOES, IN BUSHELS PER ACRE, ON FARMS CLASSIFIED ACCORDING TO THEIR TOTAL VOLUME OF OUTPUT: 1934¹¹

Groups by total	Average bushels per acre				
output of farm	Selected states				United
(bushels)	Maine	New York	Florida	Idaho	States
20 to 39	93.5	54.6	62.6	43.5	57.0
40 to 99	124.4	78.5	75.7	54.9	70.2
100 to 499	169.7	112.2	87.4	79.3	88.6
500 to 999	211.0	141.4	103.9	119.2	106.1
1,000 and over	342.2	198.5	150.4	220.0	180.4

the farms with high average yields, but such developments are commonly associated with greatly increased use of farm machinery.

Larger dairy farms with the more productive cows not only harvest hay with tractor-drawn cutters and automatic loaders, but have automatic feed conveyors and manure conveyors and other devices reducing the routine labour of caring for cows and barn. Milking machines, when used to full capacity, save approximately 50% of the labour required for milking and represent a 25% reduction in total cost of milk production.¹²

On crop farms, soil preparation with horse or mule requires repeated trips over the same field. This work can often be more efficiently completed in a single trip by a tractor with a hitch of different implements one behind another. Single-row automatic corn planters drawn by a horse obviously consume more labour time than four-row planters

* On farms having one cow the average yield of milk is slightly higher than on farms having two or three cows, and the yield of butterfat is slightly higher than on farms having two to five cows. This seems to reflect the fact that farmers with one cow depend slightly less on pasture feeding than do small farmers with two or more cows. Also it should be noted that more than a million and a half farmers—mostly among the smallest and poorest—have no cow. And less than 7% of the milk produced on one-cow farms is sold.

drawn by a tractor. Spreading fertiliser by hand or scattering it from a wagon is more laborious and less effective than the drilling by a modern planter, set to assure the exactly correct relation of fertiliser and seed. Plants or trees can be sprayed more adequately and more rapidly by machine than with the light hand spray of the small farmer.

The small farmer not only produces less per acre or per cow but also less per hour of labour than his neighbour with a somewhat larger and better-equipped farm. Increased equipment raises the cash costs of the working farmer, but when used to full advantage it also brings him a higher return than he can possibly achieve without it.

"The advance of technology in agriculture has tended to widen the gap in general well-being between farmers who are able to embrace it and those who are unable to utilise many of the fruits of science and invention. This gap is certain to widen. The hoe has not been relegated to the museum. The man with the hoe and the man with a tractor are not competitive equals where they are engaged in the same type of farming."¹³

Of course there are almost countless gradations in farm equipment and technique. Between the man with a hoe and the man with a tractor are a mass of farmers using horse-drawn ploughs, reapers and other labour-saving equipment of the pre-tractor period.

Among cotton farms and the poor unspecialised farms (general, self-sufficing and part-time) the very small farms include many with at least one horse or mule. In every type of farming except poultry and fruit, farmers operating without horse or mule are considerably fewer than farmers having less than \$1,000 gross income in 1929.

And yet 1,264,414 farms, or one farm in five, operated in 1930 without horses or mule. Five years later this group was even larger by more than half a million farms and (in 1935) more than one farm in four had neither horse nor mule. The problem of costs for the smallest farmer operating without any animal power and, of course, without a tractor has been neglected. Current studies showing differences in the cost of production on farms representing different stages of technical development have been focused on the comparison of horse and tractor. This is natural, since these poorest and smallest farmers contribute so very little to the commercial output; one per cent or less of total farm output, both sold and used, on animal-specialty farms and stock ranches; two or three per cent, on dairy, cash-grain and general farms;
SMALL FARMERS CROWDED OUT

PERCENTAGE OF FARMS WITHIN EACH TYPE OF FARMING HAVING NO HORSE OR MULE AND PERCENTAGE HAVING SMALL GROSS INCOME:

	No horse or mule	Gross inc	ome in 1929
Type of farm	in 1930 °	Under \$600	Under \$1,000
	%	%	%
General	IO	17	42
Cotton	19	34	65
Self-sufficing	26	78	98
Abnormal and unclassifie	ed 47	67°	83 [*]
Animal-specialty	5	6	12
Stock ranch	II	II	19
Crop-specialty	20	21	43
Dairy	II	4	15
Cash-grain	14	9	18
Truck	27	17	35
Poultry	41	19	40
Fruit	45	21	35

1929-1930

^a A few of these horseless farms are large tractor operations, but studies of tractor farming indicate that most large farms continue to use at least one team of horses. Insofar as tractor farms are included, these percentages over-state the numbers of poor small farms operating without a draft animal.

^bIncluding estimate for unclassified farms.

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> and six or more per cent only on fruit, cotton and poultry farms.* More than a third of all small farmers are "self-sufficing" and parttime farmers using most of their own products.

> Insofar as the very small farmer does attempt to sell his product he is confronted with several factors operating to push down prices far below fair pay for his hand labour. These include the lower costs on horse and tractor farms; pressure from monopoly buyers; and a more or less chronic surplus of supplies beyond the purchasing power of the masses.

Increasing use of tractors on the larger farms offers a serious threat

* Compare table on production without wage labour Chapter IV, pp. 88-89, and note that only in fruit farming are there farms employing wage labour but operating without horse or mule.

not only to these very small farmers who are already pushed to the very edge of commercial farming but also to the lower "middle" farmers and the upper stratum of poor farmers who operate with animal power. For the advance of mechanised farming tends toward lower average costs. Efficiently operated tractor farms can show lower costs than horse farms for each unit of output, in spite of the monopoly prices which farmers must pay for mechanised equipment and the replacement of parts.

Studies comparing horse and tractor in actual operation take no account of these excessive costs. They also commonly understate the existing advantages of efficiently operated tractor farms since they include among the mechanised farms some on which the volume of power available and the implements attached to it are not well adapted to the needs of the individual farm. The tractor may be too heavy, with needlessly high cost of operation. Or the farmer may be using with his tractor old horse-drawn implements not perfectly adapted to tractor work. Or the tractor may be too light to draw the large equipment that would be most economical for an extensive acreage. Or the mechanised equipment may lie idle longer than necessary because the farm is too small to utilise it fully.

In the chaos of the farmers' quest for labour-saving and cost-cutting equipment (and the high-pressure salesmanship of the farm machinery companies) some farmers have thus increased their costs instead of lowering them, simply because they were unprepared for reckoning every detail and were then unable to fit their farms to an imperfectly adapted mechanisation. As a result, most of the averages available fail to make clear the full differences in cost on horse farms and on the most efficiently equipped tractor farms.

In the tractor farmers' efforts to reach better adjustment between farm layout and equipment, many of them have expanded their scale of operation. Behind the increasing numbers of tractor farms has been an unmeasured greater increase in their share of the total farm output. As yet, there is apparently no type of farming in which the tractor farms could meet the entire current demand; but such a development before many of the tractorless middle farmers of to-day are ready to retire is quite within the range of possibility. As that day approaches, the definition of "small" farmer will have to be revised upward, and unless new elements are brought into the situation by vigorous organised action a much larger percentage of all farmers will be poor.

In 1929, tractor farms were barely one-seventh (13.5%) of all farms in the country, but already they were producing more than half of the commercial output. At the other extreme are the mass of small farmers; the smallest (under \$600) numbering over one-fourth of all in the United States and producing less than 4% of the farm products sold; and the slightly less poor, over one-fifth of the total, with gross income between \$600 and \$1,000 who produced less than 8% of the farm products sold. Between the tractor farms and the poor farms are the smaller "middle" farmers operating mostly without a tractor but commonly employing a little wage labour. These were in 1929 about 38% of the total and contributed a proportionate share of the commercial product.

Tractor farms numbered 851,457 in 1930, while 525,452 farms reported gross income above \$4,000 in 1929 and 628,006 reported gross income between \$2,500 and \$4,000.

ESTIMATED	DISTRIBUTION	OF	TRAC'	TOR AN	JD	NON-TR	ACTOR	FARMS	AND	THEIR
	PRODU	ICTS	, BY	GROSS	IN	ICOME:	1929			

Farms grouped by total value of product in 1929	Percentage Farms	distribution in 1929 Farm products sold
Mostly without tractor "		
Under \$600	28.0	3.4
\$601-1.000	20.8	7.4
\$1.001-\$2.500	32.0	27.7
\$2,501-\$4,000	5.7	10.5
Mostly with tractor *		
\$2.501-\$4.000	4.7	8.7
\$4.001-\$6.000	4.9	14.0
Over \$6.000	3.9	28.3
A11	100.0	100.0

^a In spite of individual exceptions it is fair to assume that the smaller farms do not have tractors. Except for the author's estimate of tractor and non-tractor production within the \$2,500-\$4,000 group, the distribution of farms and commercial output (by gross income groups) is taken from the National Resources Board (Supplementary Report of Land Planning Committee, Part I, 1936, p. 5). It does not include the unclassified farms whose gross income was not reported by the census of 1930.

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Subsistence Farming

While the small farmers—three million or more of them—are being edged out of commercial farming, they also have less than their share of the food used by the farm families that produce it. Food used by the farm family is a large part of the total small farm product, except on the sharecropper farms raising cotton or tobacco. But small farms not only have a negligible commercial output. They also have less home-grown food than larger farms. Poorest farms (under \$400 gross income) averaged only \$148 worth of products for home use in 1929, while "middle" farms averaged over \$240 worth.

AVERAGE	FARM	VALUES	OF	PRODUCTS	USED	$\mathbf{B}\mathbf{Y}$	FARM	FAMILY	WHICH
			RAI	SED THEM	: 1929) ¹⁴			

Gross farm income	Products used °	Gross farm income	Products used °
Under \$401	\$148	\$2,501-\$6,000	\$275
\$401-\$600	219	\$6,001-\$20,000	281
\$601-\$1,000	224	Over \$20,000	504
\$1,001-\$2,500	244		7.4

"These figures do not include feed raised on the farm and fed to animals on the same farm.

No farm provides a completely adequate food supply for the family. It was estimated by the National Resources Board that home-grown products should be supplemented during a year by at least \$100 worth of purchased food, if a farm family is to have "the barest food necessities." ¹⁵ This minimum assumes that the farm family have milk from their own cow, but 1,500,000 farm families have no cow. Even if the farmer's entire energy is directed to so-called subsistence farming, the family would have to buy sugar, salt, pepper, molasses, coffee, tea, cocoa, vanilla, baking powder, citrus fruits and rice (except in warm regions), and green vegetables out of season. No amount of home canning will give the subsistence farm family an "American" standard of food. Cash must be forthcoming, also, not only for taxes or rent, but for clothing and all other supplies.

In Knox County, Kentucky, each of the 176 families living along a tributary of the Cumberland River had less than \$400 total income from farm and other sources during the year ending April 1, 1933.

This included farm products used by the family and averaging \$147 or about 40 cents a day. Necessary expenses (taxes or rent, horseshoeing, feeds and seeds) averaged \$43 per farm. These were covered by sales of farm products with an average cash margin of \$15 per farm. Supplementary earnings, away from the farm, brought the average available cash for purchased food and all other family needs up to \$68 per farm.¹⁶

Over 900,000 farm families, or more than 15% of all in the United States, had less than \$400 gross farm income in 1929.

Subsistence farming means destitution and the certainty of disease from malnutrition unless it is merely a part-time supplement to other well-paid part-time employment. Small farmers cannot make a decent living from commercial farming. They cannot even feed their families adequately from the products of their farms.

About forty per cent of the small and poor farmers reported no other occupation in 1929. Nearly 20% worked elsewhere less than 25 days in the course of the year. Perhaps 15% had anything like regular work away from their farms. Many of them own a piece of land, but it can no longer support them.

The three million small farmers and their families are victims of the capitalist process. Farm destitution, like the destitution of unemployed masses in industrial centres, is related to the increasing productivity of labour and the narrowing markets which are universally characteristic of capitalism in its present stage of general crisis. For capitalism—both on farms and in industry—is geared for abundance in production with a smaller working population. At the same time it allows no proportionate increase in the purchasing power of those who actually do the producing. And it is unable to restore to the productive process masses who are unemployed. Three—and perhaps four million small farmers are added to at least ten million unemployed workers who exist through work projects, or relief, or help from employed relatives.

Attempts to solve the small farmers' problem on the land are bound to fail unless they are tied in with determination to solve the problem of poverty and unemployment in industry. Millions of underpaid and unemployed workers need better housing, better clothing, more household supplies, a more abundant diet. At least three million farmers

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need exactly the same things. As yet the dead hand of capitalist profit has held back a rational and effective attack on these interdependent problems.

Small farmers and industrial workers are beginning to realise that their interests run closely together. Beginnings of joint organised effort have been made by the Congress of Industrial Organisations and the Farmers Educational and Co-operative Union. But most of the small farmers are still unorganised. And the unions and farmerlabour political groups tend to shy away from any such sweeping measures as might be labelled "Red". We return again to these questions. For it is true that they raise issues involving the very basis of capitalist society.

CHAPTER VIII

Middle Farmers Burdened with Debt

FARMERS with medium-sized farms and with small farms are alike victims of the economic forces operating in our capitalist society. The general crisis of capitalism has greatly intensified their problems. But the problems are not identical for these two great sections of the farm population. Small farmers are crowded out from commercial agriculture. And even where they are able to compete in commercial production they do this at the cost of tremendous physical exertion which brings them at best a totally inadequate income. To the farmer with a medium-sized farm, whom we shall call a "middle" farmer, economic crisis means that he has produced-or is equipped to produce-a fair volume of commodities which he cannot sell for prices covering his cash costs of operation. And his costs include a heavy burden of business debts piled up through his dependence on borrowed capital and rented land. Such dependence, with the resulting toll exacted from the farmers, has been one important means of direct exploitation of middle farmers by finance capitalists.

Of course middle farmers may also face disaster and poverty through crop losses, but for middle farmers such losses are not commonly the underlying cause of a basic farm crisis until other factors are also lined up against them.

Thus, in the Northwest, severe droughts of 1929, 1934, and 1936 were especially disastrous to the middle farmers' business status because certain trends of prices, income and debt had been increasingly burdensome before 1929. In the South, the Mexican boll weevil was destroying much cotton for ten years or more before the World War. It completed its march from Texas to the Atlantic coast just when the World War prices for cotton collapsed. Invading an area unprepared for the pest, the weevil sharpened in the southeastern states the postwar crisis of cotton farming.

Problems of middle farmers have aroused more active concern than the problems of small farmers other than sharecroppers. For outside of the cotton belt, where sharecroppers play an important commercial rôle, and the fruit and truck areas dominated by large capitalist concerns, the middle farmers are still the typical commercial farms in the United States. Even including these areas, farms with gross income ranging between \$1,000 and \$6,000 in 1929 were 46.4% of all farms and produced about 58% of the total output.* It is primarily the middle farmers who have been the constantly recurring subject of congressional debate. And most of the federal farm legislation has been designed to aid middle farmers and the capitalist concerns to which they have become hopelessly indebted.

No gross income limits exactly fit for middle farmers in all types of farming. Livestock farms are very small and struggling affairs unless they have a gross income considerably above \$1,000. And a livestock farm or a grain farm with gross output above \$6,000 or even above \$10,000 may still be a true middle farm, with a working farm operator and a small amount of wage labour. But exact limits of the group are not so important as the broad fact that more than half the total farm product comes from middle commercial farms, and that these include some three million farm families.

Middle farmers are always affected in some degree by the ups and downs of the business cycle, as finance and industry move from boom to crisis through depression and recovery to another boom and another crisis. Mass unemployment reduces the market for meat, eggs, chickens, fruits, vegetables. It means a slowing down of textile activity and the market for cotton, as workers have to forgo replacement of clothing and housefurnishings. Decline in industrial payrolls is always reflected in declining gross income for farmers.

They have felt most severely the crisis of the 1890's, the crisis of 1920-21 when the war boom collapsed, and the crash of 1929. During each of these periods, prices of farm products dropped more sharply

* See table, Chapter III, p. 38.

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than prices of industrial products, and each crisis has been more severe than the one before. It has found the farmers carrying a heavier load of debt and heavier cash expenses. Increasingly, crisis incomes have meant for the middle farmer not only less money for keeping up the farm and buying things needed for the family. They have meant that many farmers have had to leave the farm because they could not meet their rent or their mortgage interest and taxes.

Behind the cyclical ups and downs of industry and finance, middle farmers have been profoundly affected by certain basic trends common to all capitalist development but operating to-day with peculiar force in agriculture. These include two broad groups of factors.

One group is tied in with questions of market and price and is directly related to world developments. This includes not only general business conditions but the long-range trends in world supply and foreign demand for wheat and cotton; increasing pressure by monopoly buyers and the effect of speculation; and increasing competition with large-scale farms which are able to cut costs—and prices—through the maximum use of technical advance. Products vary, and we cannot generalise on markets and prices of the 1930's until we have taken up certain important commodities separately. This we shall do in the next chapter. Meanwhile we merely note the obvious fact that when middle farmers receive very low prices, they cannot possibly meet their costs and obtain a decent living.

Increasing Business Debt

The other group of problems weighing upon middle farmers is tied in with their increasing dependence on rented land and on credit and borrowed capital. This was clearly apparent in the 1920-21 crisis following the World War boom. It has been generally recognised in the more severe crisis of the 1930's. But now often forgotten is the fact that this question of business debt involved a continuing state of crisis for middle farmers throughout the 1920's, even when gross farm income was stabilised well above the low point of 1921.

Mortgage debt rose steeply between 1910 and 1925 and involved a storm of foreclosures which we shall discuss in a moment. But this mortgage debt was only one phase of the problem. Rental payments, taxes, and production credit had also risen sharply. Farmers have carried more than their share of the tax burden; and they have paid dearly for their short-term credit.

Short-term loans were estimated in 1924 as amounting to 30 to 35% of the total farm indebtedness.¹ These include not only loans from commercial banks but production loans from fertiliser companies, processors or distributors, and deferred payments, with high interest, on farm implements purchased but not yet completely paid for.

Before the World War, short-term loans to farmers by commercial banks were about \$1,600,000,000, but when the war boom collapsed in 1920, such loans had risen to \$3,900,000,000.² These loans outstanding in 1920, apart from all other debts and expenses, equalled 29% of the gross farm income of that year and 44% of the greatly reduced income of 1921. Part of this debt was repaid by new long-term borrowing on mortgage. Part of it was defaulted and became a factor in the great wave of bank failures that swept through the farm states in the 1920's. Part of it was taken over by government agencies set up to meet the emergency of the first post-war crisis.

On farmers' personal and collateral loans from small town commercial banks interest rates have been notably higher than interest rates of city banks. In the 1920's, in each Federal Reserve District except Boston, New York and Philadelphia, the average interest rates charged by member banks in places with less than 15,000 population ranged from just over 6% to nearly 10%.³

Government provision for short-term credit at low interest rates has been further developed since the crisis of 1920-21 and is an accepted part of the farm program. For short-term bank loans the farmer's debt situation was perhaps less serious in the 1929-32 crisis than it had been ten years earlier. But for all other phases of credit and debt, the burden grew heavier during the 1920's. Production loans from non-banking corporations have played an increasingly important rôle.

When the World-War boom collapsed in 1920, nearly two-thirds of all farmers were carrying fixed charges for mortgage interest or rent.

Throughout the North and West mortgaged owners who rented no land and tenants who owned no land were largely of the middle group. Their average value of land and buildings came nearer to that for all farmers than did the smaller averages of unmortgaged owners or the larger averages of part-owner and manager farms.* In the South, part owners, mortgaged full owners, and cash tenants all showed averages fairly close to the average for all southern farmers. Manager farms were definitely larger. Cropper and many share tenant farms were definitely smaller. Differences among the other four tenure groups were much less clearly marked in the South than in the North and West.

It is fair, therefore, to assume that the trends in average gross income of all farmers give a rough basis for comparison with the trends in mortgage interest and rental payments.

RANGE OF INDEX, AVERAGE PRICES PAID BY FARMERS: 1923-1929⁴ (1910-14 equals 100)

Feed	134 to 148
Fertiliser	126 to 131
Farm machinery (not tractors)	146 to 154
Building materials	158 to 164
Equipment and supplies	133 to 144
Seed	142 to 214
Commodities for family maintenance	158 to 164
Average, all commodities purchased	152 to 157

At its war-time peak in 1919 average gross farm income was about \$2,626, a figure some 155% above the pre-war average. From this peak it dropped in two years to a point only 33% above pre-war. After 1922 it was stabilised until 1929 around \$1,800 a year, or from 65% to 80% higher than the pre-war figure.** Prices, however, for commodities needed in production and in family maintenance also remained considerably above their pre-war levels.

Allowing for these higher post-war prices paid by farmers, the

* Except that in Middle Atlantic states in 1920 and East North Central states in 1920 and 1930 tenant farms were slightly more valuable than part-owner farms.

** These figures are derived from the U. S. Department of Agriculture estimates of gross farm income, as published in 1938 and earlier years. Revised estimates for recent years back to 1925 were published in 1939. For each year these are larger than the old estimates previously published. Since revised figures, including new methods or additional data, are not yet available for years earlier than 1925, we assume that the old average gross farm income from 1923 to 1929 had a purchasing power ranging roughly from 10% to 20% above pre-war.

After 1929, farm income dropped sharply for three successive years. In 1932 it was roughly 55% below the 1929 total, and in 1932 and 1933 it was below the pre-war total. Prices paid by farmers also dropped somewhat after 1929, so that the decline in average farmer purchasing power was somewhat less than the decline in actual dollars. But the farmer continued to pay higher prices than he had paid before the war. In 1932, the average gross farm income had a purchasing power at least 25% below pre-war.

Throughout the post-war period, fixed charges (rent, mortgage interest, and taxes) have remained at a much higher level.

Rented farms were valued about twice as high in 1920 as in 1910. This was true for the country as a whole, but it understates the increase in each of the southern divisions and in the West North Central states.

TENANT FARMS: AVERAGE VALUE, LAND AND BUILDINGS

	1930	1920	1910
New England	\$7,218	\$5,978	\$3,702
Middle Atlantic	8,695	8,954	6,430
East North Central	12,512	19,607	10,595
West North Central	14,008	25,272	11,089
Mountain	9,747	15,450	10,879
Pacific	20,056	24,406	16,546
South Atlantic	2,286	3,427	1,504
East South Central	1,720	2,508	1,050
West South Central	3,864	4,973	2,322
United States	6,148	9,690	4,662

Even after the sharp decline in farm real estate prices during the 1920's the rented farm was still costing considerably more in 1930 than in 1910, except in the Mountain states.

figures for the 1920's offer a better basis for comparison with earlier years than a combination of revised and unrevised estimates. (See Appendix A.)

The wide discrepancy in the figures for 1929 as given by the Census of Agriculture, on the basis of farmers' own reports, and as estimated originally by the Department of Agriculture is also noted in our Appendix B. The revised estimate increases this discrepancy by another \$750 million. Mortgaged owners were plunged into the post-war crisis (1920-21) with an average load of mortgage debt about double the average they had carried in 1910. This was further increased in the midst of the crisis, as farmers caught with heavy short-term debts (swollen, in part, by farm equipment purchased during the boom and not yet paid for) tried to "fund" their immediate debts. That is, they took out a mortgage, or they increased their mortgage debt, and with such a new long-term loan paid their outstanding bills and short-term loans. Between 1920 and 1925, the mortgage debt reported by farmers owning all or part of the land they operated had risen by \$200,000,000 although the total number of owner farmers had declined.⁵

Throughout the 1920's many owners were unable to meet their interest and taxes. But although foreclosures and other forced sales increased, more and more of the owner farms were mortgaged. And in most regions the average debt per mortgaged farm was higher when the crisis of 1929-32 broke upon the farmers than it had been when the war boom collapsed.

	1930	1920	1910
New England	\$2,565	\$1,855	\$1,088
Middle Atlantic	3,029	2,278	1,508
East North Central	3,773	3,362	1,783
West North Central	5,639	5,398	2,568
Mountain	3,714	3,824	2,221
Pacific	4,909	4,736	2,405
South Atlantic	1,965	1,870	851
East South Central	1,551	1,606	701
West South Central	2,634	2,316	1,255
United States	3,561	3,356	1,715

AVERAGE MORTGAGE DEBT REPORTED BY MORTGAGED FULL OWNERS

That "... taxes take from 15 to 40 per cent of the net income of the whole class of farmers, averaging not far from 30 per cent" was stated by B. H. Hibbard, of the University of Wisconsin, at the Second International Conference of Agricultural Economists in 1930.⁶ Farm taxes had not only risen with the increasing price of land, but the tax rates per \$100 of value had been pushed up also. And after 1920, when farm land prices slipped downward, the average tax per acre climbed still further. In eight of the nine geographical divisions and in 40 states, taxes were higher in 1925 than in 1920. After 1925 they moved up more slowly, but record high tax rates were reported in one state after another from 1928 to 1931. By 1930, the tax burden on the farmer had increased about 160% beyond the pre-war figure while his income (corrected for changes in price levels) was almost back at the pre-war level.

Increase in tax rates has been tied in with school costs in thinly settled communities and with the extension of good roads which even with national, state, and county aid bear heavily on the local district. Studies made in at least a third of the states "all show that the farmer, in proportion to his ability to pay, is taxed more heavily than any other important occupational group." ⁶ Mr. Hibbard correctly blamed, in large part, the basic system of taxing real estate and tangible property. Applied to the business or professional man this fails to bring his personal property out of its hiding. But the farmer "with nothing but visible property and most of it real estate, is paying, not according to ability, but at least double that, while a large part of the tax paying ability of other classes is carrying a light load indeed."⁷

That the owner-farmer's so-called fixed charges for mortgage payments and taxes had increased out of all proportion to average farm income is illustrated by the following summary table. For tenant farms, average value had increased, but slightly less than average income. We select 1925 for comparison with the pre-war years, partly because a census of agriculture was taken in that year, and partly because farm income was then slightly above the average for all years between 1921 and 1930.

In 1925 average gross income of farmers was 80% above pre-war, but its purchasing power was only 12% above pre-war. The average mortgage debt of full-owner farms and the average tax per acre (all farms) were over 130% larger than before the war. Allowing for the change in prices of farm products, the average debt (on mortgaged fullowner farms) and the average tax per acre represented a volume of farm production about 52% above pre-war.

Such averages of course conceal many variations, but the averages

INDEX FIGURES FOR 1925 (1910 equals 100°)

	Based on cur-	Corrected for
	rent dollars	price changes
Average gross income, all farms	180	112
Average "value" of tenant farms	147	96 °
Average mortgage debt, full-owner farms	233	152 °
Average tax per acre, all farms	295	193 °

^a Tax figures, gross farm income totals and price index are estimates by Bureau of Agricultural Economics. Numbers of farms, value of land and buildings, and mortgage debt are census figures.

^b Corrected by index of prices paid by farmers: 1910-100; 1925-160.

^c Corrected by index of prices received by farmers: 1910–100; 1925–153.

themselves are a valid index of the broad general trend. We have little exact information relating these trends to the size of the individual farm. But according to the Department of Agriculture, smaller farms came out of the war boom with a proportionally heavier debt than large farms.⁸ And we know that credit in any form becomes less costly per \$100 borrowed as the scale of operation increases.

On farm mortgages, for example, a study of all mortgaged farms operated by their owners in 100 counties in eleven states showed that in each of the eleven states mortgage costs in 1930 were highest for loans under \$500 and lowest for loans larger than \$7,500.⁹ In reporting on this study, the Bureau of Agricultural Economics gives two principal reasons for such differences. First, commissions and other financing cost (apart from interest) are relatively fixed amounts which do not vary directly with the size of the loan. Second, local lenders, willing to bother with small loans, usually expect higher interest rates than the insurance companies and specialised agencies which prefer to invest larger amounts.

Taxes, also, are relatively heavier for the middle and small farm owner than for the very large farm owner. In part this reflects variations in tax rates in different areas. But it is also fair to assume that in many counties the large owners obtain a relatively lower assessment valuation than is granted to their smaller neighbours. This is clearly indicated in the study of taxation by the Twentieth Century Fund.¹⁰ In the country as a whole, the average farm real estate tax was \$1.26 per \$100 of farm value (land and buildings) as reported to the census of 1930. For farms of 1,000 acres and over the average tax (\$1.02 per \$100) was lower than for farms of any other acreage group. This variation which is definite for all states combined is also clear within nine states.*

The Crisis of Foreclosures

Foreclosures and forced sales of farms for taxes and bankruptcy had reached a very high level before the economic crisis broke upon the country in 1929. In the period from March 15, 1925, to March 15, 1930, more than one farm in ten changed owners in this way. These include not only owner-operator farms but farms operated by tenants and possibly some of the very small number of farms operated by managers. While we cannot relate the forced sales to the tenure of the farm operator, we may be certain that almost all of them would be related to the failure of the farm as a paying business. The absentee owner would seldom allow the farm to be taken from him for unpaid taxes or mortgage default if he were getting the return he expected from his tenant. Unmortgaged owner-operators would not lose their farms at a tax-collector's sale unless they were in extreme poverty.

Although no nation-wide official estimates are available for earlier years, this ratio of forced sales seems to have been without precedent for the country as a whole.**

* Colorado, Connecticut, Florida, Iowa, New Jersey, New Mexico, Texas, Vermont. ** Records from 1881 to 1932 for Brookings County, S. D., show the following acres on which foreclosures were instituted, per 1,000 assessed acres.

YEARLY AVERAGES FOR PERIODS INDICATED

	1882-1891	16.0	1922-1931	19.6
37	1892-1896	10.8	1932	44.5

Before 1900, the foreclosure rate was slightly above 20 per 1,000 in four years only (1889, 1890, 1891, and 1896), touching its highest point at 25.4 in 1890. Between 1922 and 1932, inclusive, the foreclosure rate was above 20 per 1,000 in six years, and twice it rose above the previous record figure, climbing to 34.6 per 1,000 in 1924 and 44.5 per 1,000 in 1932. In this county, no year from 1897 to 1921, inclusive, had foreclosures affecting so many as 10 acres per 1,000, and from 1899 to 1920 less than five acres per 1,000 were foreclosed in any one year. (Data from South Dakota Agricultural Experiment Station, Circular 9, South Dakota Farm Mortgages, p. 62.)

It is an important fact that foreclosures and other forced sales had reached such a high total during the 1920's. This shows unmistakably that the farm crisis—and especially the crisis of the middle farmers was serious long before the 1929 crisis of banking and industry and the general collapse of prices. But at the same time the farm crisis was greatly sharpened after 1929. When gross farm income shot downwards, the rate of forced sales increased markedly. It was practically doubled in several regions.

FORCED SALES OF FARM REAL ESTATE, NUMBER PER 1,000 FARMS¹¹ (totals during 5-year periods)

	March 15, 1925 to March 15, 1930	March 15, 1930 to March 15, 1935
New England	59.0	84.0
Middle Atlantic	60.5	110.2
East North Central	101.4	157.7
West North Central	148.6	247.3
Mountain	193.4	212.5
Pacific	93.3	168.4
South Atlantic	110.0	204.0
East South Central	89.4	215.5
West South Central	89.1	171.0
United States	108.0	189.3

This crisis of foreclosures and other forced sales was especially severe during the 1920's in the wheat and cattle regions. Then from 1930 to 1935 the cotton states were also heavily involved.

Roughly, 40 farms in every hundred went through a forced sale between 1925 and 1935 in the West North Central and Mountain states; and more than 30 farms in every hundred in the South Atlantic and East South Central states. Only in New England and the Middle Atlantic states did fewer than 20 farms in every 100 change hands by forced sale in the ten-year period between March 15, 1925, and March 15, 1935.

Foreclosure and bankruptcy sales were everywhere more frequent than sales for unpaid taxes. They were especially important in the Northwest (prairie and mountain states). Here the wide prevalence of

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FORCED SALES OF FARM REAL ESTATE FOR TAX DELINQUENCY AND OTHER CAUSES, NUMBER PER 1,000 FARMS:¹² 1925-1935

	Tax delinguency	Foreclosure, bankruptcy.etc.
New England	48.1	94.9
Middle Atlantic	51.3	119.4
East North Central	43.0	216.1
West North Central	59.7	336.2
Mountain	130.2	275.7
Pacific	55.1	206.6
South Atlantic	126.8	187.2
East South Central	119.4	185.5
West South Central	71.3	188.8
United States	78.7	218.6

heavy mortgage debt, together with other borrowing, had piled up interest payments which required, during the 1920's, about 10% of the middle farmers' gross income in Western states and 12% of their gross income in the West North Central states. These figures and the combined percentages of interest and taxes shown in the following table are based on the owner-operated farms included year by year in a sample study of farm income and expenses by the Bureau of Agricultural Economics.

INTEREST AND TAX PAYMENTS AS PERCENTAGE OF GROSS INCOME 12

	North Atlantic	E.North Central	W.North Central	South Atlantic	South Central	Western *
1925	9.0	17.0	20.0	13.3	16.0	17.0
19 2 9	9.0	16.0	17.8	11.1	12.7	14.8
1932	15.8	32.4	45.8	24.0	34.5	37.4
1936	10.2	18.0	23.2	10.6	14.2	18.0

^a Not shown separately for Mountain and Pacific states. But we know from the census that in 1930 the mortgage debt was relatively heavier in the Mountain states than in the Pacific states.

The prairie and mountain states which reported the largest interest payments during the 1920's suffered the sharpest decline in gross income after 1929. Here, at the depth of the crisis in 1932, interest and taxes together consumed from 40% to 46% of the middle farmers' greatly reduced total receipts.*

When current charges consume so large a share of gross income, it is obvious that the middle farmer finds it next to impossible to pay off the principal and operate without a long-term debt. While remaining a middle farmer without benefit of surplus value extracted from a considerable corps of wage workers, he has expanded toward a somewhat larger scale of operation. This expansion, which has allowed him to survive as a commercial farmer, has at the same time brought him to a situation where he can continue to operate only under one of two conditions, both alien to the deeply-rooted desire for free and independent ownership. He may-if marketing conditions enable him to meet his current obligations-retain his mortgaged farm and carry a permanent burden of debt. Or he may accept tenancy as less burdensome than mortgaged ownership. There is no third possibility for the middle farmers as a class, since they need more operating capital than they can possibly accumulate along with acquiring and holding clear title to their land.

Farmers outside of the South are coming to recognise that under leases giving security of tenure the tenant's situation may be quite as favourable as that of the mortgaged owner. This was stated in 1933 in the report on *Rural Social Trends* prepared under the auspices of the President's Research Committee on Social Trends. Referring to an exceptionally prosperous farm community which the authors had surveyed in 1915 and again in 1931, they say:

"Tenancy had increased from 39 to 52 per cent in the fifteen-year period. The ages of owner-operators increased. One other significant tendency was revealed by the fact that in 1915, 94 per cent of the tenants declared their intention of becoming landowners, while in 1930 the percentage dropped to 45. In conversation some of these tenants declared that ownership was no longer a goal toward which to direct family effort, and pointed out that functions of ownership and utilisation or cultivation could well be separated. Many of the tenants were making more money and were living

*We say, roughly, 40% for the Mountain states since their mortgage debt was always relatively heavier than the mortgage debt in the Pacific states. And the average, 37.4%, shown in the table represents a balance between these two different sections of the West. better than the owners. Why should they be 'tied down' with debt and taxes, without opportunity to change occupations should the opportunity present itself, they argued." ¹³

Among the tenant farmers in four counties of the corn belt, a later government survey found that only one tenant in four felt clearly that he would be better off as a mortgaged owner. Two-fifths stated definitely that they preferred tenancy.¹⁴

Such a reaction to the increasing problems of owner-farmers is reported only from the North and West. In the South, tenancy involves a definitely dependent status. And everywhere, many tenants are extremely poor. As a group they have had markedly less stability than the owner-operators. But side by side with the many tenants who shift about, there has developed an increased proportion of tenants who remain on the same farm year after year. Such stable tenancy has been most prevalent in the older sections of the North. Since the collapse of the World War boom, it has increased most markedly in the Northwest (West North Central and Mountain states) where the debt crisis of owner-operators has been most severe.

Of course, whether as tenant or mortgaged owner, the middle farmer must pay a yearly toll for the use of land. The best that he can hope for under the present order of things is to obtain, by organised effort, a legal recognition that the claims of landlord or mortgagee shall be met only after the basic needs of the farm family are provided for.

Such organised effort developed toward the end of the Hoover administration, when foreclosure sales were at their peak. In the grain areas, in Pennsylvania, and in Alabama groups of farmers and their wives resisted foreclosure. When a farm was put up for auction, great crowds would gather and carry out a "penny sale," bidding it in for less than a dollar and returning it to the owner. Their resistance aroused the creditors who fought back vigorously. When Clifford James, a Negro farmer-owner in Alabama, resisted the seizure for debt of his only mule, the sheriff opened fire and James and three other farmers were killed.¹⁵ Shooting of farmers was threatened in various places but only against the Negroes were guns actually used.

On May 1, 1933, a New York Times story described an army of trucks in militia-ruled counties of Iowa, "toiling through the mud, khaki-clad soldiers, rifles slung on their backs, clinging to the sides." They were looking for a young farmer, suspected of having forcibly stopped the sale when a judge tried to sell a ruined farmer's land. Nineteen farmers had already been arrested in connection with this incident.

The widespread resistance to seizure of farm property for debt was undoubtedly responsible for the special measures enacted by Congress under President Roosevelt's guidance for the relief of farm debtors.*

We cannot fully explore the crisis of the middle farmers until we have taken up the question of prices and markets. But it is clear that cutting across the problem of farm income trends is this other basic problem of operating capital and debts, which in turn is tied in with problems of land ownership and the farmer's security of tenure.

General Decline

For middle farmers who have been able to retain ownership of their farms, this crisis has involved a sharp drop in expenditure for permanent improvements and for fertiliser. This is illustrated by figures on the sample group of owner-operators to which we have already referred. At the depth of the crisis in 1932 every possible outlay was eliminated and average total expenditure for "farm machinery and tools," "fertiliser," and "farm improvements," was cut to just over \$100. As farm incomes increased again, all such expenditures rose somewhat above the 1932 figures, but the three groups showed quite different trends. So, for example, in 1936 and 1937 when gross farm income was considerably higher than in 1932 but still much lower than it had been from 1925 to 1929, these middle farmers spent more for farm machinery than they had been spending in the 1920's.**

In the Atlantic states, both North and South, where the largest amounts of fertiliser are used, these farmers reported rising expendi-

* An entirely new departure was the special fund of \$800,000,000 made available during 1933 and 1934 for what were called "Land Bank Commissioner Loans." These were made available to farmers who could not qualify for the regular Federal Land Bank mortgage loans and were intended to enable farmers to escape foreclosure or to repurchase farms recently lost through foreclosure. In arranging the commissioner loans, local administrators were instructed to assist farmers in obtaining wherever possible a general scaling down of their debts.

** Except in two sections of the country which showed the following average expenditures for "machinery and tools." For these sections we give, below, the reported averages

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tures after the sharp reduction in the worst years of the crisis. But (even allowing for price changes) their volume of purchased fertiliser remained lower in 1936-37 than it had been in several years of the 1920's. And in every section of the country these farmers were spending very much less than formerly for farm improvements.¹⁶

YEARLY AVERAGE EXPENDITURE FOR FARM IMPROVEMENTS

	North Atlantic	E. North Central	W. North Central	South Atlantic	South Central	Western
1923-25	\$140	\$128	\$156	\$116	\$116	\$150
1926-29	151	127	156	99	103	156
1930-31	108	75	76	54	46	104
1932-33	бі	31	22	42	30	27
1934-35 1936-37, cui	97 r-	63	47	59	47	64
rent price at 1923-2	es 93 5	94	58	82	57	I10
prices b	100	101	63	89	61	118

"Other than machinery and tools, fertiliser, and livestock.

^b Dollars, corrected by Bureau of Agricultural Economics price index for "building materials for other than house."

This means a declining trend in general upkeep of the middle farmers' land and buildings. And, at the same time, it has involved again a generally rising trend in the farmers' burden of debt. This is especially significant since these owner-operators have been in each year a group with average gross farm income higher than the average for all farmers in the United States.

and, separately, these averages corrected to 1923-25 dollars by the Bureau of Labor Statistics price index of agricultural implements.

	North A Average	Atlantic states Average at	West Nort	h Central states Average at
1023-25	\$ta6	1923-25 prices	reported	1923-25 prices
- 9-3 - 5	ΨI30	\$130	\$137	\$137
1926-29	144	147	224	220
1930-31	126	137	134	9 145
1932-33	66	80	46	-45
1934-35	95	105	40 100	50
1036-27	100	0	-09	121
- 95 ~ 57	13/	148	181	105

Even in these two regions, a higher percentage of the farmers' gross income was spent for "machinery and tools" in 1936-37 than in the 1920's.

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Crisis began, for the middle farmers, with the collapse of the World War boom. It has not ended with the upturn since 1932-33. Government benefits have brought genuine aid. Various phases of the New Deal farm program have saved middle farmers by the hundreds of thousands. But it has not solved their problems. Before we turn to the other questions of market and price, we must note the most conspicuous elements of underlying business crisis which persisted during the years of considerable upturn that preceded the renewed drop of 1937-38.

Thousands of farmers in the Northwest were able to continue operating their farms only because they received seed and feed loans from the federal government. Many of these are still outstanding, and the question of cancellation is a live political issue in Congress.

Payment on principal of the farm mortgages taken over by Federal agencies since 1932 has had to be delayed from year to year. Moratoriums preventing foreclosure of privately held mortgages are also still in force in several states.

Farmers' expenditures for general upkeep and farm improvement have remained since 1932 far below their level in the 1920's. Soil conservation is carried on to a certain extent with federal aid. But the middle farmer is not able, as an independent business man, to meet the cost of maintaining and improving his permanent plant. He is driven to increase his debt for farm machinery, and he cannot from his own resources offset depreciation of buildings and exhaustion of the soil.

What, then, are his prospects of larger income and a wider margin between gross income and a bare living? Before we can attempt to answer this question we must see what is happening to the market for the chief farm products.

Export Crops Lose Markets

PRODUCTIVITY of labour on the land has increased. Agriculture has developed in countries which are "newer" than the United States. Draft animals have been displaced by tractor, motor truck, and automobile. Artificial fibres are made from wood pulp and coal. Great corporations have grown up in the field of processing and distribution. Each of these trends has a part in restricting the markets and pushing down the prices for American farm products.

Back of these broad general facts lie as many different situations as there are commodities produced on farms. We cannot attempt to cover them all. We sketch very briefly what has happened to wheat, cotton, cattle and hogs, and milk. A few other products will be referred to as the discussion develops.

"Supply" means the volume of a given commodity actually at hand, in current production and in storage. It does not refer to the possible supply which might readily be available if existing productive forces were used to their full capacity. In the same way, "demand" means something far smaller than the broad human need for farm products. For in our capitalist world, a need divorced from the power to buy does not create an effective demand. It has no part in the "market." Farmers are well aware of the shocking contradiction, for example, between ragged, undernourished children and "excess supplies" of cotton and butter. But the cotton farmers' and the dairy farmers' own living depends on selling their cotton and their milk or butterfat. Unless parents can buy these things, their children must do without them, while unsold supplies pile up in storage warehouses and depress prices. This criminal absurdity of want in the midst of plenty is, of course, basic in our present-day America. Certain things can be done about it, even before the masses of workers and farmers are ready to change the underlying economic relationships which have created it. But before we take up these broad basic questions, we must see what has happened to farmers' markets and prices in the interplay of forces at work under capitalism.

Wheat

Wheat is the most important commercial food crop in the United States. Next to cotton it is the most important commercial crop of any kind, both as a source of cash income to farmers and, historically, as a contribution to the export trade.

In acreage, numbers of farms involved, and total farm value wheat is less important than corn. But most of the corn is used as livestock feed on the farm that raises it. Indirectly, corn is commercially important, but it is chiefly "sold on the hoof." A very much higher proportion of the wheat enters into trade, and wheat is a direct source of much more cash income than corn.

The price of wheat affects directly almost one-fifth of the farmers in the United States. The 1935 census reported wheat grown and threshed the previous year on 1,363,741 farms. For farms of all sizes and all regions, the average cost of producing wheat in 1936 was estimated at \$1.21 a bushel, and that year the general average price received by the farmers for wheat of all grades was \$1.026 a bushel. In no year from 1928 onward was the average farm price of wheat up to the average cost of production, as estimated by the Department of Agriculture. From 1930 to 1935 inclusive, the average price was even lower than the average cost apart from rent.

Or we may compare, year by year, the price of wheat with a "parity price" computed on the basis of a pre-war average (July, 1909, to August, 1914) with allowance for current differences in prices paid by farmers and in their mortgage interest, taxes and freight rates. Such a comparison has been offered monthly by the Department of Agriculture under the Roosevelt administration. And a rougher comparison based only on commodity prices can be carried back to 1914. Even during the few years since the World War boom when wheat at the farm averaged more than a dollar a bushel, the price index commonly lagged far behind the index of prices farmers had to pay. Only in 1925 did wheat farmers receive a yearly average price which gave a bushel of wheat the purchasing power it had before the World War. For a few months early in 1937, the farm price rose above "parity," but most of the 1936 crop had already been sold and the temporary rise failed to hold when the new crop was harvested.

Wheat production has been geared to a large export trade. Part of the wheat farmers' problem has always been due to marked variations in foreign demand for United States wheat. During the crisis of the 1930's wheat exports dropped almost to the vanishing point. But the decline in exports had begun thirty years before.

The peak of wheat exports before the World War boom had been touched at the turn of the century when for several years their net volume ranged from about 190 million bushels to over 235 million bushels and represented from 29% to 37% of the American crop. Then as Russian, Canadian, Australian and Argentine wheat became an increasingly important factor in world production and international trade, exports from the United States moved pretty steadily downward until from 1909 to 1911 they were only about one-third as large as they had been in 1900 and 1901.

The World War wheat boom began in 1914 when exports were larger than they had ever been before and the high average yield per acre of that year and the next found ready market and set new highs in the farm value of the total crop. As far as exports were concerned, the boom was interrupted by short crops in 1916 and 1917. Weather was against the wheat farmer. Farm labour was scarce because of the full employment and high-sounding wages in war industries. Wheat acreage harvested, total production, and wheat exports all declined. But this brought no crisis to the farmers since wheat prices were climbing and setting records unequalled since the Civil War.

American wheat was desperately needed by the Allies, and after the United States had entered the war in April, 1917, the government began a vigorous campaign around the slogan "Food will win the war." It guaranteed the wheat growers that even the largest possible crop would bring them a minimum of two dollars a bushel. Resulting expansion in wheat acreage and farm value of the crop reached its peak in 1919, after the war was ended. Farmers averaged in that year just over \$2.16 a bushel and the wheat crop was valued at more than two billion dollars.

In the period from 1914 to 1919, inclusive, net exports of wheat had again—as in the 19th century—averaged more than one-fourth of the total wheat produced on American farms.

Exports continued large through the early 1920's until European production was restored to normal. American farmers also benefited from the fact that no wheat from Soviet Russia was then offered on the European market in which Tsarist Russia had been an important factor. Such large American exports could, however, be only temporary. In the later 1920's the three great competitors—Canada, Argentina and Australia—were, together, producing as much wheat as the United States and sending a far higher proportion of it into the chief import markets of Europe. At the same time, European governments were assisting wheat growers and deliberately increasing production as a measure of self-protection in the critical state of world trade.

Since 1924 when net exports from the United States represented 30% of the wheat crop, the volume and percentage exported have declined sharply. So far as unregulated private trading is concerned, the export market can no longer be counted upon as an important outlet for American wheat.

After deducting exports, wheat available for all uses within the United States increased less rapidly than population during the first twenty years of this century. There was no shortage, supposedly because changes in eating habits had slightly reduced the amount of flour in the average diet. After the United States entered the War in April, 1917, use of wheat was sharply reduced in response to systematic propaganda. Average consumption of grain has continued to be lower than it was before the War.

But in the second half of the 1920's, when exports were beginning their sharpest decline, wheat fields harvested were increased by ten million acres. Output of wheat available for feed and flour to be consumed within the United States increased more than population. In 1928 and again in 1931 the crop was well above 900 million bushels with net exports carrying off less than one-sixth of the crop. Carry-over on July 1, which marks the beginning of the new wheat year, rose from the former average of approximately 100 million bushels to a record total of 375 million bushels in 1932 and 378 million bushels in 1933. This carry-over would have been even larger had not the wheat growers been substituting greatly increased amounts of wheat for other livestock feeds on their own farms. Carry-over was increasing in other countries also, though not so markedly as in the United States.

> SUPPLY OF WHEAT (CARRY-OVER), JULY I¹ (in millions of bushels)

	United States	Other countries "
1925	108	465
1926	100	553
1927	IIO	577
1928	II2	639
1929	228	792
1930	289	654
1931	313	733
1932	375	668
1933	378	766
1934	274	919
1935	148	804
1936	142	624
1937	103	436
1938	173	445
1939	255 °	934

^a Not including China and U.S.S.R.

Old stocks only. Comparable figure for 1938 was 154; for 1937, it was 83.

The large crop of 1931 helped to push still further down the price of wheat which had begun to drop sharply in the previous year. Low prices—lower than any during the crisis of the 1890's—together with crop restrictions of the New Deal program, brought a sharp cut in wheat acreage. Production was also reduced by the severe droughts of 1933 and 1934, and by the end of the crop year 1934-35, carry-over had been brought close to the pre-crisis average.

Prices were once more rising, though still below the average cost of production. The crop restrictions of the first AAA had been de-

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clared invalid. The drought which cut into the 1936 wheat crop had at the same time sharply reduced the livestock on farms in the wheat regions. So in 1936-37 farmers with one accord increased their wheat plantings until acreage approached the war-time peak. In spite of some continuing drought and relatively low yield, the 1937 crop was nearly nine hundred million bushels.

Voluntary reduction of wheat acreage was indirectly encouraged by the Soil Conservation Act of 1936, but this was proving an ineffective check on production. Lacking penalties and benefits directly related to wheat acreage, the area seeded for the 1938 harvest climbed more than 25% above the acreage set as a voluntary goal. It reached an all-time record of 80 million acres and, in spite of low yield per acre, produced a crop which had been exceeded only three times in the history of this country.

YEARS OF HIGHEST AMERICAN WHEAT PRODUCTION

1938	931,000,000 bu.	
1931	942,000,000 bu.	
1919	952,000,000 bu.	
1915	1,009,000,000 bu.	

Excess acreage above a voluntary allotment under the Agricultural Adjustment Act of 1938 was somewhat less for the harvest of 1939.

Remembering the boom in American wheat during the war of 1914-1918, some traders and farmers looked for a similar boom in the autumn of 1939. But sober second thoughts noted the exceptionally large world carry-over of wheat. And Great Britain gave notice that it would turn first to Canada and Australia, and to Argentina whose currency is tied to the British pound.²

Piling up of surplus wheat beyond the volume which can be sold brings irresistible pressure on the price received by the farmer. He cannot expect a price covering the average cost of production (and including a margin for the average rate of profit) as long as supplies of wheat are greatly in excess of market demand.

The new element in the wheat situation of the 1930's is the general trend toward a chronic supply of wheat greater than the commercial market can absorb. The population of the world includes millions of men, women, and children who are undernourished and need wheat, the best bread food that has been developed. In China, Spain and the backward regions of Africa, and also in most of the warstrained countries of Europe, the masses exist at a near-starvation level, but there is little possibility of extending in the near future a regular commercial trade in wheat. Serious undernourishment is also widespread among the poor masses in our own southern states, but the use of more wheat, as an improvement on their corn-meal diet, will depend first on some shift of production from corn to wheat within the South. It offers no immediate solution for the commercial wheat farming of the Middle West and the Great Plains. With the cuts in WPA and in local relief in 1939, bread became a luxury for thousands of destitute workers' families even in "prosperous" Northern cities.

Supplies of wheat within the United States are more than adequate for the needs of our own population. And in attempting to cut down production of wheat, the government has followed the easiest and most obvious way to establish a rough balance between supply and demand. The question of using federal funds (to be raised by higher taxation of the wealthy) for relief of chronically half-starved masses in other countries has never yet been pushed into the arena of political debate. Progressive labour forces appealed to the Administration to finance a large shipment of wheat to Spain to aid the hungry Republican forces, but the appeal fell on deaf ears. Mass pressure was not strong enough to counterbalance the influence of reactionaries who wanted a Franco victory.

Another alternative to mere restriction of output is the possibility of aiding a shift from wheat to other food products of which the supply is too small to provide a liberal diet for every man, woman, and child. But this also is not considered practical from the capitalist viewpoint. The very products of which there is not enough to satisfy the needs of health also tend to show a "surplus" in relation to mass purchasing power. The government nibbles at the edges of this problem, with its Federal Surplus Commodities Corp., but it has never squarely attacked it. And the problem never will be squarely attacked 'until workers and farmers take it up as an active issue for organised, aggressive struggle. Meanwhile, it is important to understand the functioning of commercial supply and demand and the measures which have seemed to offer the farmers their only hope of higher prices.

For wheat, supply and demand in the United States have been tied in with acreage and yield in at least half a dozen other wheat-growing countries. Costs and crops on American farms vary from year to year with acreage planted, weather, and yield per acre, and the general trend of prices. Such variations have gone along with even more unpredictable variations on millions of other farms throughout the world. Only when the average total crop from year to year is related approximately to the average market demand is the basis laid for relating the price of wheat to the farmers' cost of production.

To accept the closing of export markets for American wheat and to attempt adjustment of production here to the needs of the domestic market would simplify the problem of prices. But such a permanent lowering of wheat acreage would involve other serious problems for many of the farmers now equipped for commercial production of wheat. Unless more carefully safeguarded than the temporary crop restriction plans carried out hitherto, it would squeeze out entirely from the wheat market many thousands of the medium-sized farms.

That the United States government recognises the importance of holding a share in the world wheat trade is clear. During the crop year 1938-39, the government through the Federal Surplus Commodities Corp. subsidised the export of 93,754,000 bushels of wheat (including flour). The United States has also taken the initiative in planning for a second international wheat conference looking toward possible agreements on export quotas and prices for exported wheat.3 Already, in 1933, the chief wheat producing countries had come to an agreement on export quotas. But the agreement broke down immediately in the crop year 1933-34 when Argentina had a surplus for export far beyond its quota, and prices for North American wheat were rising with the short crops due to drought. Until the European war broke on September first, hopes were brighter for a stable agreement in 1939, since the chief exporting nations had all adopted some form of export subsidy and these measures were proving costly without solving the problem.

Excess supply of unsold grain is one aspect of the farmers' price

problem. Along with this basic maladjustment, the farmers have to endure the price manipulations of wheat speculators and large corporations through which the wheat is channelled from farm to ultimate consumer. These middlemen and processors operate so as to hold down the farm price of wheat and to hold up the city price of wheat products.

In the crisis of the 1930's, for example, city prices of bread and flour dropped far less than the farm price of wheat. In 1923-25—the base period used by government studies of retail food prices in cities wheat averaged \$1.20 a bushel (threshed and delivered at the shipping point). From this three-year average, it had dropped to 39 cents in 1931 and 38 cents in 1932, a decline of 68%. Flour sold by the pound to city housewives dropped during the same years from 5.2 cents (average in 51 cities) to 3.2 cents, a decline of barely 39%. And white bread dropped from 9 cents the pound loaf to 7 cents, a decline of 22%.

WHEAT AND WHEAT PRODUCTS: INDEX OF PRICE TRENDS ⁴ (1923-25 equals 100)

	Wheat at the farm	Wheat flour	White bread
1932	31.8	61.5	77.8
1933	61.8	75.0	78.9
1934	70.5	94.2	92.2
1935	69.2	98.1	93.3
1936	85.3	92.3	91.1
1937	80.0	92.3	96.7
1938	45.9	76.9	95.6

Not only in the crisis, but in every year since 1923-25, the farm price of wheat has been relatively lower than the city price of bread and flour.

Trading on the grain exchanges directly affects the prices paid to the farmers day by day at the country elevators. For this price to the farmer equals the price paid at the time on the exchange, for cash wheat to be delivered within a short given period at the city elevator, minus the cost of handling and transportation to the delivery point.

Farm prices are reduced by the fact that transportation and elevator

charges are high, reflecting monopoly control of these facilities by railroad companies and large traders.

Theoretically, the price paid for cash wheat on the exchange represents an amazingly intelligent estimate by hundreds of wheat trading "experts" in Chicago, Kansas City, Minneapolis, Winnipeg, Liverpool, and Buenos Aires as to the present and future relation of supply and demand. Actually, however, the prices paid day by day for cash wheat on its way to the city elevator or already in storage there, are influenced by the prices paid for future title to future wheat not yet harvested, perhaps not yet even sown. And these wheat "futures" are the chips of wealthy gamblers who rig the market and fleece the small outsiders (the "lambs") who venture into the game. Sometimes they grow rich by selling short and pushing prices down. Sometimes they push up the prices by cornering the cash wheat required for ultimate settlement of the "futures" accounts. But these peaks of artificially high prices pass quickly into a sharp reaction and do not benefit the farmer.

Trading in futures is commonly defended by capitalist writers as serving to stabilise the price of wheat to the farmer throughout the year; and as supplying the processors with protection by "hedging" against unpredictable changes in the price of grain.* But the Federal Trade Commission in the latest of its several studies of grain trading disposes effectively of such arguments.⁵ Trading in futures, it says, does not stabilise prices but increases fluctuations. It gives opportunity for gambling and manipulation by skilled market operators. It makes possible much artificial activity with a large volume of trading that has no function except to increase the commissions of brokers and the profits of the traders. Futures do not, in actual practice, reflect supply and demand conditions with respect to actual grain and thus they introduce an unsound influence on current cash-grain prices.

* "The larger flour mills use 'hedging' transactions in two ways. Sometimes the miller *sells* futures in order to hedge cash grain which he has on hand for manufacture into flour. More frequently he contracts to deliver flour in the future, on the basis of the present price of wheat futures, and then *buys* wheat futures; as he buys in his 'cash' wheat for milling, he sells a corresponding quantity of futures. An increase in the price of wheat will make his flour contract less profitable but will make his 'futures contract more profitable." (Edwin W. Patterson in Yale Law Journal, April, 1931, p. 848.)

The FTC also questions whether the futures market really serves as insurance against merchandising risk. And such insurance cannot benefit the farmer "unless competition among merchandisers, converters, and distributors of grain and grain products is such as to keep the total handling margins...down to the minimum consistent with efficient storage and distribution." ⁶ Absence of competition destroys the relationship between cash and futures markets on which hedging depends.

Actually, a high degree of monopoly is involved in the domination of the market by a few large traders and in the storage control of grain required for ultimate settlement of futures. Only grain stored in licensed "regular" elevators may be offered for satisfaction of futures when the month of delivery arrives. In Chicago only 21% of the wheat storage space was "regular" in 1935, and these "regular" elevators were controlled by six firms among which three big trading companies held a greatly preponderant position.⁷

Production of wheat flour for sale is notoriously dominated by a few giant milling companies. At the top of the list stands General Mills, Inc., which ground in 1934 more than 21% of the commercial wheat produced in the United States. General Mills, Inc., Pillsbury Flour Mills Co. and Colorado Milling & Elevator Co., milled in that year 127,470,000 bushels of wheat, and the ten companies next in size milled 88,905,000 bushels of wheat. Altogether, these 13 companies milled 60% of all wheat sold in this country that year.⁷⁴ The Federal Trade Commission comments that

"Through trade organisations, controlled by the larger milling companies by means of plural voting, competition in the flour milling industry has been restricted. Methods of restricting competition included curtailment of production, use of a blacklist, agreements, understandings, and cooperation to sell at a profit, to exchange information on selling prices, to fix the elements of selling prices, to fix uniform carrying charges on forward sales of flour, and to fix uniform differentials on the prices of flour sold in the different kinds and sizes of packages." ⁸

While the gross farm income from wheat dropped from nearly \$704 million in 1929 to a little over \$203 million in 1932 and recovered only to \$367.4 million in 1935, the big milling companies were increasing their capital and maintained an average profit of more than 7% on total investment.⁹ The four leading bakers (other than chain stores) and the three chief cracker companies * showed average profits of 7.3% and 14.6% respectively during the six years from 1930 to 1935 inclusive.¹⁰ For 16 grain elevator companies and commission houses, profits during these six years averaged 10.3%.¹¹

For the great baking companies, profits really "satisfactory" to the stockholders depend in part on a low price of wheat. So the *Wall Street Journal* stated on June 8, 1939, "... the entire baking industry, with a few exceptions, has prospered since the beginning of 1938 due to fairly stable sales volume and lower costs centring about the long decline in wheat prices from mid-1937 to the middle of 1938." And writing on July 25, 1939, about General Mills, Inc., *Wall Street Journal* made even more interesting admissions:

"The notable increase in earnings last year resulted from the combination of stable low wheat prices; evenly maintained selling prices for trade marked package goods; a handsome gain in sales volume of such trade marked articles as 'Wheaties' breakfast food and 'Bisquick' prepared flour; and an unexpectedly large demand and good price level for animal feeds which provide a considerable part of the cream in milling company operations."

These generous profits of traders and processors account for much of the enormous spread between the farm price of wheat and the city price of bread in which wheat flour is the chief ingredient. Less than one-seventh of the city price of bread in 1935 went back to meet the costs of the farmer who raised the wheat. From the other sixsevenths certain genuine costs had to be met: transportation, storage, milling, yeast and milk, baking and distribution. But at every stage of the journey from the farmer's truck to the housewife's kitchen, the genuine costs are swollen by charges based on one or another form of monopoly. Speculators, wheat middlemen, millers, bakers, elevators and railroads are all preying upon the farmer who produces the wheat and upon the ultimate consumer who buys the bread and the flour. Companies and firms involved are relatively few, and they operate against the interests of the masses on the land and in the city. Their

* Continental Baking Co., Ward Baking Co., Purity Bakeries Corp., General Baking Co., National Biscuit Co., Loose-Wiles Biscuit Co., United Biscuit Co. of America. methods could be regulated and their swollen charges could be reduced. Farmers and city masses have a common interest in obtaining effective regulation and narrowing the spread between the city price of bread and the farm price of wheat. Farmers would receive more and housewives would pay less if predatory monopolies could be brought under strict control.

Government attempts at aiding the wheat growers have gone through several different phases since the United States entered the World War. The Congress of 1917, which guaranteed the farmer a minimum of two dollars a bushel on the wheat crop to be harvested the following year, also forbade speculation and hoarding by traders and processors. So the Administration set up a government-owned corporation to buy grain from the farmers, carry it through the year and sell it at a steady price to domestic millers and foreign governments.

This corporation began operations while the farmers were selling their 1917 crop and it ceased to buy grain on May 31, 1920. In closing the official record of its activities, the corporation's economist shows how well the government corporation carried out its task and that no regulation of private trading could so effectively have stabilised the price of wheat.¹² Of course, he goes on to say that such government activity in peace time "would undermine all initiative, enterprise and progress," but those who have watched the operations of "initiative, enterprise and progress" since that was written in 1925 are not so certain that only in a war emergency could the trade in grain be more efficiently handled by a government agency than by private speculators.

Since private trading and speculation in wheat futures were resumed in 1920, attempts at regulation have been developed to include limitations on daily price changes and a maximum allowed for commitments and holdings by any one firm. (Almost immediately on the outbreak of war, in September, 1939, the limits on daily price changes were doubled.) Although traders are registered and their books are subject to inspection, the big interests have developed methods of evasion. The Federal Trade Commission makes detailed recommendations for further strengthening of regulation, including possible government operation of grain elevators in competition with those privately owned.¹³
Maintaining a fair farm price of wheat in the face of excess supply is, as we have seen, a somewhat separate problem. Since 1928, government action on this point has gone through three major phases.

1) The Federal Farm Board, operating under the Agricultural Marketing Act of 1929, carried surplus wheat purchased with government funds, and attempted to maintain prices by withholding this surplus from the market. This policy was based on the assumption that the difficulties were temporary. Actually, export markets did not recover but continued to decline. And the severe economic crisis reacted disastrously on the prices of wheat, cotton and other farm products. In the end, the 257,000,000 bushels acquired by the Federal Farm Board in its first two years had to be disposed of. It is commonly believed to have become a positive factor in pushing down the price of wheat.

2) The Roosevelt Administration (taking office in March, 1933) attempted under the Agricultural Adjustment Act (1933) to balance supply and demand by reducing the production of wheat and thereby, indirectly, to raise the price. This plan depended on a stated cut in wheat acreage, with the compensation to every co-operating farmer paid from a tax on the processing of wheat. When the use of processing taxes for benefits to farmers was declared unconstitutional * a new approach to the problem was developed.

3) Acreage in wheat was indirectly affected by the Soil Conservation and Domestic Allotment Act of 1936, under which farmers have received benefits for acreage withdrawn from soil-depleting crops, including wheat. Under this Act, benefits were related not merely to one or another crop but to the farmer's general shift from soil-depleting crops to soil conservation and soil-building practices. With the Agricultural Adjustment Act of 1938, acreage allotments for wheat as such were again set up and benefits were paid on the 1938 and 1939 crops to all wheat growers choosing to keep within their allotted acreage. The co-operating farmer may, in addition, receive a separate benefit for soil-building practices, under the Soil Conservation Act of 1936.

Possibility of enforcing marketing quotas was provided in the Agri-

^{*} In the Hoosac Mills and the rice millers cases, started in January, 1935, and decided in the U. S. Supreme Court in January, 1936.

cultural Adjustment Act of 1938. If wheat supplies threaten to rise above a certain figure, the government will propose that only a stated percentage of the crop shall be sold. This "marketing quota" must be submitted to a referendum vote among commercial wheat growers and only if two-thirds of them accept it does it become a binding order for the current year, with penalties for those who exceed their quota.

By way of direct aid to the wheat farmer's income, two forms of payment have been available in addition to the benefits related to wheat acreage and soil conservation. First, if wheat prices fall below 75% of "parity" the Secretary of Agriculture is authorised to make a direct supplementary payment to the farmers. This parity payment, as authorised in the Price Adjustment Act of 1938,¹⁴ may be large enough to assure him a total per bushel not greater than 75% of parity.

Second, if the farm price of wheat falls below 52% of parity, or if the July crop estimate threatens a surplus beyond "normal" consumption and export,* the Commodity Credit Corp. shall make available throughout the marketing year loans on wheat at a rate not less than 52% and not more than 75% of the estimated parity price of wheat on July first, when the marketing year opened.¹⁵ Loans were available on the 1938 wheat harvest at 60 cents a bushel, and on the 1939 harvest at a seasonal average of 70 cents a bushel.

Recognising the difficulty of maintaining prices in the face of a sizable surplus, the government has used certain customs receipts, earmarked by Congress for general promotion of exports, to subsidise foreign sales of American wheat. Secretary Wallace in his annual report for 1938 (p. 14) stated:

"Our share in the world's wheat trade is far too small. The best course will be to aim at retaining our fair share of the world's wheat trade or say 100,000,000 bushels annually, and to follow an export-sales policy calculated to realise this objective. We should provide an adequate payment on the normal production on acreage allotments consistent with soil conservation and good farming practices. We should take prompt and effective steps

^{* &}quot;'Normal year's domestic consumption,' in the case of corn and wheat, shall be the yearly average quantity...consumed in the United States during the ten marketing years immediately preceding the marketing year in which such consumption is determined, adjusted for current trends in such consumption." (U. S. Statutes at Large, vol. 52, 1938, p. 41.)

for the adjustment of the wheat acreage next year, and we should be cautious in loan operations."

When December, 1939, estimates promised a short crop of winter wheat, due to serious drought in the autumn of 1939, the export subsidy was withdrawn.

Cotton

Cotton markets and prices affect directly more than one-fourth of the farmers in the United States. But within the cotton belt, cotton holds a much more dominating position than this figure implies. In seven states more than 70% of the farmers harvested some cotton in 1934.* The crisis in cotton has plunged into greater destitution a vast rural population which has always lived in extreme poverty. (See section on The South in Chapter III.)

Returns from the cotton crop are peculiarly bound up with forces beyond the control of the cotton farmers themselves. Economic crisis cuts into the consumption of cotton more than it affects the consumption of wheat. Slowing down of industry reduces the factory demand for cotton. About 40% of the cotton used within the United States goes into industrial consumption, including automobile tire fabric; webbing for machinery belts, harness and conveyors; yarns for insulating electric wires; cloths for rubberising and chemical treatment; and "an unlimited number of uses." ¹⁶ Mass unemployment and general decline in purchasing power reduce the market for clothing and household supplies. Emergency relief budgets include almost nothing for replacements while (except in the South) the diets recommended for relief cases lean heavily on wheat products.

Consumption of cotton has also been somewhat affected by the increased production of artificial fibres and yarns. These have developed various uses which cut into the demand for cotton, silk and wool. Assuming that less than half of the world rayon production from 1929 to 1938 displaced cotton directly or indirectly, it is roughly estimated that it reduced the world consumption of cotton during those ten

^{*} Census figures: Mississippi, 86.2%; Alabama, 84.5%; South Carolina, 80.2%; Georgia, 79.6%; Louisiana, 74.1%; Texas, 72.7%; Arkansas, 72.6%. The total number of farms harvesting cotton in 1934 was 1,920,123.

years by 10,000,000 bales, or an average of one million bales a year. This would be less than 4% of the volume of cotton actually used. In offering this estimate, the Bureau of Agricultural Economics warns that it "should not be taken as an accurate appraisal." But the Bureau also states that "considering its present properties, and its price relative to prices of competing fibres, it [rayon] is approaching a limit of expansion into those fields for which it is suitable." The newer glass fibre, however, offers a threat to cotton for draperies and insulating materials.¹⁷

"Prosperity" in the cotton belt depends not only on the ups and downs of demand for cotton in the United States, but quite as much on the demand for American cotton in other countries. This in turn rises and falls with the activity of the cotton textile industry, and also with changes in the supply of foreign cotton.

From every angle this question of cotton exports is extremely important. Until 1937, cotton was not only the most important agricultural export from the United States but the largest single item (in dollar value) among exports of all kinds from this country. During the World War, the wheat crop rose temporarily to a greater farm value than the cotton crop, and cotton exports declined while wheat exports were increased as a war measure. But in 1922 cotton resumed its leading position and held it until 1937. Then low cotton prices and the decline in volume of cotton exports pushed cotton into second place and allowed petroleum products to take the lead as the largest single item in the list of American exports.

To the cotton farmers it is more important that commonly more than half the cotton crop has been exported. Until 1937 there had been only eight cotton years since 1865 when exports took less than half the crop: the World War years 1917 to 1919; three years in the 1920's; and 1930 and 1931. Also until the middle of the 1930's American cotton constituted more than half of the entire world supply of cotton. This meant that while the world price of cotton dominated the American market, this world price reflected roughly the basic costs of cotton on American farms. Of course, prices moved constantly up and down with variations in supply and demand and the manipulations of the cotton traders. But as long as American farms were the chief source of supply, the point about which world cotton prices fluctuated was related to the cost of producing, handling, and transporting American cotton.

Changes since the World War have been undermining this supremacy of American cotton. British mills which formerly led the world in textile manufacturing outside of the United States have yielded leadership to Japan. Along with the rise of textile manufacturing in Japan, China, and India has gone also some expansion of cotton acreage in Oriental countries. And while England's total use of raw cotton has somewhat diminished, British mills are less dependent than formerly on American cotton. Looking toward imperial self-sufficiency, the British government has stimulated cotton growing in areas of Africa under British control or leadership. Brazil, also, hard hit by the crisis in coffee and prodded by Japanese enterprise, had pushed up the output of raw cotton from about 400 thousand bales in 1920-21 to more than two million bales in 1937-38.

Counting out the Soviet Union which was never an important factor in the market for American cotton, the total foreign production climbed by nearly 50% during the 1920's and again by roughly 40% during the 1930's.

WORLD PRODUCTION OF COTTON ¹⁸ (in thousands of bales)

	Other countries		
	United States	(except U.S.S.R.)	U.S.S.R.
1020-21	13,664	6,906	58
1920 21	14,716	10,256	1,279
1929-30 1020-21	13,873	9,914	1,589
1021-22	16,877	7,759	1,843
-93- 3- 103 2-33	12,961	8,684	1,816
- 95- 55 102 2-2 4	12,712	11,467	1,887
1034-35	9,576	11,736	1,738
1035-36	10,495	13,575	2,250
1036-37	12,375	15,226	3,250
1937-38	18,412	14,682	3,482

Use of cotton (outside of the self-sufficient Soviet Union) has not kept pace with its production. After the post-war economic crisis, as consumption returned to normal levels, the crop year was starting with a world supply equal to about one-third of a year's total consumption. But in the declining consumption of the economic crisis which began in 1929 supplies piled up to a record figure. On August I, 1932, at the beginning of the crop year 1932-33, world carry-over of American and foreign cottons was more than 18,000,000 bales, or enough to provide 74% of the volume consumed during the next twelve months. This August first came between the two crop years when the farm price of cotton in the United States averaged only about six cents a pound, or less than one-third of the average price in the 1920's. The relation between huge supplies, far greater than the market could absorb, and a price away below the cost of production was dramatically clear.

Reduction of cotton acreage, under the New Deal program, together with some recovery in industry which again increased domestic consumption, brought the burden of unused cotton down to a reasonable supply. Between August, 1932, and August, 1937, the world carry-over of American cotton had been reduced by more than 50%. Exports, however, failed to increase in spite of increased foreign textile activity, for the rising volume of foreign cottons was cutting into the foreign demand for American cotton.

Still the situation had been greatly eased. Prices were encouraging, rising to 10 to 12 cents a pound. Restrictions on acreage were looser after the annulment in January, 1936, of the acreage and benefit provisions of the original Agricultural Adjustment Act. So cotton plantings were increased, although they remained considerably below the pre-New Deal figures. But in 1937 the weather was extraordinarily good and brought a record-breaking yield, with a total crop larger by 1,500,000 bales than the largest crop ever before harvested in the United States. While this record crop was being harvested, industry was moving into another depression which cut by more than a million bales the cotton used within the United States during the next twelve months.

By August first, 1938, the world carry-over of American cotton had reached a new record total, topping by some 400,000 bales the figure at the depth of the crisis in 1932. For all cottons, foreign and American combined, the cotton year 1938-39 opened with a carry-over equal to more than 80% of the total world consumption in 1937-38. Supply far beyond market demand once more pushed down the price of cotton.

The farm price of cotton, like the farm price of wheat, "normally" reflects the prices current on the city cotton exchanges, as practically all of the cotton for export and most of the cotton used in this country passes through the hands of traders and speculators. Three big private traders (Anderson, Clayton & Co., G. H. McFadden and Bros., Weil Bros.) handled in 1934 about one-fifth of the crop.¹⁹ They have prospered while most of the cotton farmers have sunk into extreme destitution. The Federal Trade Commission, in its latest study of marketing, trading and processing of farm products, shows that five lint cotton middlemen had higher net operating income in each year from 1931 to 1934 than they had had in 1929.²⁰

COTTON INC	OME TRENDS, FARME	KS AND MIDDLENI	EN. 1929-1934
	Farmers'	Lint cotton	middlemen °
	gross	Sales of	Net operat-
	return	cotton	ing income
1020	\$1,245,104,000	\$419,801,000	\$2,682,000
Index	100.0	100.0	100.0
1930	52.9	65.9	16.3
1931	38.8	36.3	192.6
1932	34.1	27.9	181.9
1933	51.0	34.5	111.0
1934	47.8	52.0	183.7

^a Five companies.

The volume of sales of the five middlemen declined, with the sharp decline in the total value of the cotton crop, but they were able so to manipulate their affairs that from a much smaller dollar value of sales they cleared in three of the years a net operating profit more than 80% higher than their profit in 1929.

About 15% of the 1934-35 crop was sold through the American Cotton Cooperative Association and its affiliated state and regional associations.²¹ But this co-operative is dominated by the larger growers and plays in with the commercial traders.

In cotton it is conspicuously true that the small grower receives less

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for his cotton than the large grower. This is most obvious in the marketing of sharecroppers' cotton, for the crop is sold by the landlord and the price paid to the cropper depends, in part, on the landlord's honesty. And it is "honest" practice among the larger landlords to allow the cropper the price current on the day of settlement, when the cotton is delivered at the local gin, but then to hold the tenants' cotton for actual sale at a later date. Even independent small farmers are unable to hold their cotton for the more favorable price that usually prevails after the bulk of the crop has been sold.

Absence of grading standards at the small country gins also operates against the small growers. Even if they try to improve the quality of their cotton, they receive from local buyers only a price based on general impression as to the grade produced in that neighbourhood. After ginning, the small growers' cotton is subject to more physical handling and more intermediate trading than the cotton of the larger growers. Every middleman has his rakeoff, which pushes the price paid to the farmer that much further below the price on the nearest cotton exchange. Benefits of the co-operatives which grade the cotton at the gin and provide a short-cut between the farmer and the textile mill, or the big trader who sells abroad, do not reach down to the small grower.

Neither is the low price to the farmer reflected in a correspondingly low price for sheets and towels bought by the city housewife. We do not have a perfect comparison between retail prices and cotton on the farm. But even the wholesale price, which commonly varies somewhat more than the retail price, shows that the spread between what the farmer receives and the city worker pays has been greatly widened in recent years. Taking the averages for 1923-25 as 100, the farm price index dropped to a low of 23.9 in 1931 while the wholesale price (cotton goods, all types combined) followed with a drop in 1932 to 47.4.

New Deal measures in relation to cotton have followed the same line as the measures already described in relation to wheat. They have included reduction of cotton acreage with compensating federal benefits; federal loans against cotton at rates per pound aimed at stabilising prices; and "parity payments" allowed to the individual farmer to meet the difference between the prevailing farm price and 75%

LOSS OF MARKETS

	Farm price of cotton	Wholesale price of cotton goods
1923-25	100.0	100.0
1929	70.8	86.7
1930	39.9	74.4
1931	23.9	58.0
1932	27.5	47.4
1933	42.9	62.5
1934	52.1	75.9
1935	46.7	73.2
1936	52.0	70.5
1937	35.4	74.0
1938	36.2	57.4

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of the "parity" price. In addition, cotton has been subject to marketing quotas, distinct from acreage allotments, which have not yet been used in relation to wheat.

Marketing quotas were introduced for cotton by the special Bankhead Cotton Act of April, 1934, which required the Secretary of Agriculture to fix such quotas for cotton picked in the crop year 1934-35. Under the Act, the Secretary of Agriculture was authorised to fix marketing quotas for the following year also, provided the quota principle was accepted for 1935-36 by two-thirds of the growers. Similar provision for marketing quotas whenever a burdensome surplus has accumulated, was included in the 1938 amendments to the Agricultural Adjustment Act.* After a marketing quota is approved for a given year by two-thirds of the farmers producing cotton, a penalty is imposed on any grower who exceeds his quota.

In applying to cotton the farm measures of the New Deal, two special phases of crisis have developed.

* Not only for cotton, but for wheat, corn, tobacco, rice. Up to 1939 such quotas had actually been applied under the 1938 Agricultural Adjustment Act only to cotton and tobacco. Earlier laws applying to cotton, tobacco, and potatoes had been repealed in 1936. Distinct from all these measures are the marketing agreements and orders under the Agricultural Marketing Agreement Act of 1937 which may be applied to any farm product ("agreements") or to a list of products ("orders") which were not included as basic under the 1938 Act. Under the 1937 marketing act, no limitation of output is provided, and agreements and orders have included only certain provisions indirectly tending to reduce the total volume offered for sale. First, in order to avoid sharing their benefit payments with cropper tenants many plantation growers have cleared the tenants off their land, thrown the tenant farms together, and operated a somewhat smaller total plantation acreage with tractors and a relatively small number of wage workers. Only for the picking are the displaced croppers recalled to the land for a short season of wage labour.

Second, the very large cotton crop of 1937 disturbed cotton markets and prices almost as seriously as the large wheat crop of 1938 disturbed the wheat situation. Surplus cotton was again offered on the market before the carry-over of earlier years had been reduced to normal proportions, and this brought a new sharply downward movement of prices. Never did the carry-over of wheat equal so much as 60% of the year's consumption. Only once-in July, 1932-was it large enough to supply more than half of the volume needed in the following year. But the cotton carry-over on August first, 1938, was equal to more than 80% of the year's consumption. And ten months later, in June, 1939, the more than 11 million bales held by the government as security for federal loans to farmers were roughly equal to the estimated world consumption of American cotton during the crop year, 1938-39.23 Loans at rates averaging between 8 and 9 cents a pound stabilised the price of cotton at this low level, until toward the end of the crop year when the supply of "free" cotton was almost exhausted. Then prices rose, but in the face of complete uncertainty as to how the government would handle its more than 11 million bales, buying was extremely slow. "Futures" trading in the coming crop held close to the government loan rate, which was about half of the much desired "parity" price.

Cotton men in the South who had pocketed considerable sums as a result of the New Deal cotton measures, turned against the Administration. They demanded that the loan cotton held by the government should be returned to former owners at a price two to three cents below the amount loaned per pound. Such a measure failed to pass in the 1939 Congress. Meantime, a new precedent was set in a barter agreement by which 600,000 bales of cotton from the government loan supply was sold to the British government in exchange for 85,000 tons of rubber. For both countries, this was a measure of preparation for war.²⁴ Secretary Wallace early in 1939 advocated, for the first time, an emergency federal subsidy on cotton exports, in order that cotton might be offered in the world market at a price lower than that current within the United States. Appropriation asked for this purpose was defeated in Congress, but some funds were available from the share of customs revenue set apart for emergency disposal of surplus farm products. A federal subsidy of 1.5 cents a pound was promised on exports during the fiscal year 1939-40. It would not apply to shipments to Canada, Mexico, and the Caribbean countries.²⁵ As a first step toward an international cotton agreement, the United States called a preliminary conference which was held at Washington in September, 1939. "Practically all of the important cotton-exporting countries were represented." ²⁵⁴

Exports rose somewhat in the autumn of 1939, as foreign commercial buyers had allowed their stocks of American cotton to fall, hoping that the huge supply in the United States would push prices even lower. This spurt in cotton exports was not mainly due to war demand. For increased military demand for cotton does not offset the war-time decline in ordinary consumption.²⁶ British naval blockade has completely cut off the German market which had been taking about 15% of the cotton exports from the United States. And future demand for American cotton in Great Britain and France may be considerably reduced. Britain is piling up large supplies of Egyptian, Brazilian, Turkish and other cottons, which might be available also to France under their close economic collaboration.²⁷

CHAPTER X

Farmers vs. Packers and Dairy Trust

FOR farmers raising meat animals or shipping milk as their chief product, the question of price is bound up more obviously and directly with the practices of a few great corporations which stand between them and the non-farm public. But here also—as for wheat and cotton farmers—supply and demand play an important rôle.

Meat-Cattle and Hogs

More farmers are raising meat-cattle or hogs than are growing wheat or cotton. And the problem of prices and markets for meat animals is more complex than the problem of crop adjustment. Exports, variations in purchasing power within the United States, weather and the conditions of pasture land, scarcity or abundance of feed grains, scarcity or abundance of breeding stock, and policies of the big companies which dominate the slaughtering and packing of meat are all factors in the situation.

American meat has faced wide variations in market demand. Like American wheat, beef cattle and beef products were being crowded out from the world market before the World War. (But with this difference from the wheat trade, that the packing and shipping of Argentine beef has been largely controlled by the leading meat packers of the United States.) After the World War boom, American exports of meat products once more declined steadily. Before the crisis of the 1930's their value was again less than it had been in the 1890's. Lard was the only important item in which a considerable volume of exports had been maintained.

LIVESTOCK AND MILK

Within this country the per capita consumption of meat has been irregularly declining. Propaganda for meat substitutes, together with high prices during the World War, started the downward trend. With the poverty of the 1930's, consumption declined again, sharply.

AVERAGE YEARLY PER CAPITA CONSUMPTION OF MEATS IN THE UNITED STATES¹

	pounds
1899-1913	151.9
1914-1928	139.5
1929-1937	128.6

As with all other farm products, the supply of meat animals varies from year to year. But since it takes more than one crop season to increase the breeding stock the variations in supply follow a longer cycle. In "normal" times, the livestock farmer weighs the price trend for meat animals and the cost of feeding them. As the supply of animals rises, demand for feed also rises. The price the farmer receives tends to fall while feed prices tend to rise, until the margin between cost and gross return narrows too much and the farmers breed fewer animals or even cut down the number of head. Then the supply of animals declines, and demand for feed also declines. Meat prices tend to move upward and feed prices tend to fall, until farmers think it worth while to increase their stock more rapidly and the reverse trend reappears.

Cutting across this over-simplified cycle are other factors in the situation. As prices rise or fall, consumer demand shifts somewhat from one kind of meat to another, and since farmers raising meat animals tend to specialise in beef cattle, or hogs, or sheep, such shifts may directly affect the cycle for any one kind of livestock. A poor crop year may push the price of feed up in spite of declining demand for feed, or an exceptionally high yield of feed grains may push down their price even when the demand for feed is rising. Also, prices paid to livestock farmers are badly jolted downward by any non-farm crisis which cuts into the workers' purchasing power.

Still, some such cycle as we have just described remains basic to the trends in livestock supply.

Numbers of beef cattle in this country touched a low figure—about 35,000,000 head—in 1895-96, in 1912, and in 1928. They moved slowly but steadily upward to a peak of nearly 48 million head in 1903-1904 and over 50 million head in 1918. The war boom hastened the upward swing which had started in 1913, and the economic crisis of 1920-21 sharpened the downward trend which had begun in 1919 as a reaction from the high prices of feed grains. The number of cattle was rising again throughout the crisis of 1929-33 at the very time when demand for meat was most sharply curtailed. But before the "normal" peak of supply had been reached, the drought of 1934 brought a catastrophic shortage of water, pasture grass, and homegrown feeds on the cattle farms of the Great Plains.

With government aid, some cattle were transported to other regions. But thousands died in the drought, and over 5,600,000 cattle and calves were purchased by the government and slaughtered for meat to be distributed among families on relief.^{1a} From 47,300,000 head on January I, 1934, the number of cattle (other than milk cows) had declined to 42,500,000 head twelve months later. As yet, no new surplus beyond market demand has developed. Farm prices for beef cattle and veal calves were in 1938 and 1939 away above those of 1932 and 1933, and ran fairly close to parity. In 1939, beef cattle topped parity in every month but August.

Hog-raising responds more quickly to price changes. Cycles of large and small supply are shorter for hogs than for beef cattle. And the basic trend in hog numbers between the 1890's and the early 1920's was definitely upward. Per capita consumption of pork had declined far less than per capita consumption of beef. In fact the all-time peaks in hog supply (as of January 1) and in the use of pork were reached in 1923 and 1924 when the total numbers of hogs on farms were 69,-300,000 and 66,600,000 head, respectively. But this was temporary. Number of hogs was sharply reduced during 1924 and 1925 in response to low prices for hogs and the high price of corn. Later peaks in hog supply (1928 and 1933) were much lower than the peak of 1923-24, but still definitely above pre-war figures.

A real crisis in hog-farming developed in 1931-33, when the prices for hogs broke under pressure of rising supply and sharp decline in mass purchasing power. Even in 1931, hog farmers were receiving less than \$6 a hundredweight, but corn was abundant and cheap (only 37 cents by December) and they planned a larger crop of pigs in 1932. Corn remained at this low figure, but when the price of hogs fell in May and June, 1932, to less than \$3 a hundredweight, the hog farmers faced disaster. After slight recovery hog prices slumped again and remained below \$3 in December, January and February of 1932-33.

Of the 1933 excess of supply beyond market demand, Secretary Wallace wrote as follows:

"Excessive supplies during May, June, and July depressed the market in late summer. In these months the hogs slaughtered in Federally inspected plants numbered 2,750,000 more than in the corresponding months of the previous year. This was a 30 per cent increase. The slaughter was about 5 per cent greater than the previous record total for May, June and July."²

With no corresponding increase in domestic consumption or in exports, storage supplies increased rapidly. Supplies of hogs for market during the fall and winter of 1933-34 promised to be at least as great as they had been the previous year. At the same time, a shortage of feed had developed which indicated an increased slaughter of beef cattle and veal calves, as many grass-fed cattle would be marketed directly from the West instead of being taken for corn-fattening in the corn belt. So the New Deal administration stepped into the picture and bought between August, 1933, and May, 1934, more than 7,800,000 animals including pigs, lightweight hogs, heavy hogs and sows due to farrow. This purchase, financed chiefly from processing taxes (which the processors passed on to the consumer), removed more than a billion pounds of hogs from the fall and winter commercial supplies and added from 30 to 35 million dollars to the income of the hog farmers. All the edible products were distributed through the Federal Emergency Relief Administration. Inedible animals were in part converted into salable inedible products. But where market prices were too low to cover cost of conversion, inedible material was dumped.

For 1934 and 1935 the administration offered a programme with federal benefits for reduction of corn acreage and reduction in the output of hogs. Since then, no further attempt has been made to adjust directly the numbers of animals, but indirectly the problem has been dealt with through allotments of corn acreage in the commercial corn belt, under voluntary plans similar to those in operation for wheat and cotton.

In spite of restricted acreage corn supplies have been abundant. The price of corn has remained relatively lower than the price of hogs, and an over-supply of hogs *for existing markets* was again threatened in 1939.

Farmers have some local outlets for their livestock. Sales to local butchers have taken about 15% of the cattle and calves and, roughly, 5% of the hogs. Slaughtering on the farm has accounted for 5% to 7% of the total cattle and calves and 20% to 25% of the total hogs slaughtered yearly since the World War. Farm slaughtering increases when prices are low and drops when prices are high.

Local slaughter is, of course, most important for very small farmers and for those commercial farmers with whom hogs and meat-cattle are a very minor part of the farm enterprise. Throughout the corn belt and on thousands of specialised livestock farms in other regions, the question of wholesale outlets is of primary importance. Here the farm producers are confronted with a small group of meat packers who operate on a nation-wide scale and dominate the interstate trade in beef and pork products.

About two-thirds of the total number of animals are slaughtered under federal inspection for interstate commerce. In this principal market, the Big Five packers (Swift, Armour, Morris, Cudahy, Wilson) handled, in 1935, 67.1% of the cattle, 71.0% of the calves, 51.9% of the hogs, and 66.2% of all meat animals combined, including sheep and lambs which we are not discussing separately.³

The big packers' tight monopoly control over livestock lending agencies, livestock trade papers, commission dealers, public stockyards and railroad terminals, refrigerator cars, cold storage plants and important retail outlets in cities was attacked by the Department of Justice in 1905 in President Theodore Roosevelt's drive against big corporations under the anti-trust laws. After fifteen years the Big Five in February, 1920, entered into a "voluntary" agreement, commonly known as the Packers' Consent Decree, under which they were bound to discontinue most of the practices by which they dominated the field.⁴

No sooner had the packers signed this agreement (which they were

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allowed two years to carry out) than they began a new legal battle seeking concessions on one point or another and obtaining extensions of time. For more than 10 years the packers were able openly to continue many of the prohibited activities. From May, 1925, to July, 1929, the terms of the Consent Decree were completely suspended. Not until May, 1932, were the terms made final and definite by a decision of the U. S. Supreme Court.

Private distributing systems (with refrigerator cars, cold storage plants and branch houses) are still permitted.⁵ But under the Packers and Stockyards Act of 1921, packers' trade practices are subject to special supervision by the Secretary of Agriculture. Knowing the devious means by which a great corporation can exercise control over a smaller company with which it does a large volume of business, we feel sceptical as to the present independence of the livestock commission houses and lending agencies with which many farmers have to deal. For livestock commission houses in 1934 supplied to the principal meat packers more than 50% of their total purchases.⁶ These packers bought directly from the farmers about 10% of the total cattle and calves and about 25% of the total hogs purchased by the packers from all sources.⁷

Retail prices of meat vary with the ups and downs of prices received by livestock farmers. But the price variations are less marked in the city than they are at the farm. Pork chops, for example, dropped by one-half from a high of 39.9 cents a pound (average in 51 cities) in 1926 to 19.8 cents a pound in 1933. During the same period, the average price of hogs at the farm declined 70%, from \$11.74 per cwt. to \$3.44 in 1932 and \$3.94 in 1933. Round steak (beef) touched its postwar high price to city consumers in 1929, at 46 cents a pound when beef cattle were bringing \$9.15 per cwt. By 1933, beef cattle had declined 60%, to \$3.63, but round steak fell only 44%, to 25.7 cents a pound.⁸

Even with such a decline in retail prices, and a decline in total volume of business, the big packers have been well able to protect themselves against loss. Farmers' cash income (gross) from livestock and the total sales of nine meat-packing companies were approximately the same in 1929. Then farmers' income declined more rapidly and more sharply than the gross income of the packers.⁹

WHY FARMERS ARE POOR

FARMERS' GROSS CASH INCOME FROM LIVESTOCK AND TOTAL SALES OF NINE MEAT-PACKING COMPANIES: 1929-1934

(in millions)

	Farmers'	Packers'
	Income	Sales
1929	\$2,372	\$2,383
1930	2,059	2,147
1931	1,431	1,642
1932	922	1,191
1933	970	1,126
1934	1,211	1,391

In the lowest years of the crisis (1932 and 1933) the farmers' cash income (gross) from livestock was barely 39% and 41% of their 1929 figure. Lowest gross sales of the nine leading packers were 50% and 47% of the 1929 figure. Such a decline in total cash return brought disaster to many farmers. For the large packers it meant some readjustment but no crisis in their affairs. A group of eleven companies, analysed in detail by the Federal Trade Commission, showed throughout the period some profit on total investment in the business, with a six-year average of 4.61%. How rapidly the readjustment was accomplished is shown by the rise in rate of return from less than one per cent in 1932 to more that 7% in 1933 and 1934.¹⁰

Even before the economic crisis of the 1930's the farmer was receiving a diminishing share of the consumer's meat dollar. The margin between farm prices of live hogs and live cattle and the average retail prices of finished meat and meat products was larger throughout the 1920's than it had been from 1913 to 1917.

FARMER'S AVERAGE SHARE OF CONSUMER'S MEAT DOLLAR¹¹ Beef Pork 1913-1920 64% 82% 1921-1928 46 63 1929-1936 42 55

From the low of 37% for beef (1932 to 1934) and 42% for pork (1932) the farmer's share had risen in 1936 to 45% for beef and 65% for pork. It always tends to fluctuate somewhat with the variations in

farm supply and marketing conditions. In pork, for example, the farmer's share had dropped again, in 1938, to 62%. No estimate on beef later than 1936 has been given by the Department of Agriculture.

Such percentages always overstate the true share of the total received by the farmer, since they take no account of dollars received by the processor for profitable by-products. This is especially true in meat packing, where fertiliser (purchased by farmers) is one of the packers' important by-products. For the big packers are important members of the informal "ring" of fertiliser manufacturers which has maintained really high prices on this essential commodity. And livestock farmers, growing corn as an essential part of their farm economy, are often among the buyers of expensive fertiliser manufactured from the animals they have sold at low price to the packers.

Farmers and city workers have a peculiarly strong common interest in obtaining more rigid control of the packing companies, to reduce the spread between prices paid to the farmers and prices charged for the packers' products.

Milk

About three million farmers depend on sales of milk or milk products as part of their cash income. Such sales in 1937 totalled roughly \$1,530,000,000, or about 18% of the farm income received as cash by all farmers in the country, apart from benefit payments under the AAA. For perhaps one-fourth of those farmers who sell milk or milk products, these are the chief source of income.¹²

Although over 100 billion pounds of milk are produced on farms every year, less than 80% of this enters the market, and less than 70% is sold at wholesale, either as milk or as butterfat.

Problems of market and price for milk and butterfat involve primarily the 70 billion pounds of milk in the two categories shown first in the table: milk sold at wholesale and milk skimmed or separated for sale of butterfat.

Dairy farmers, far more than livestock farmers or those who grow wheat or cotton, have direct contact with monopoly distributors and processors. No middlemen or intermediaries, except producers' cooperative organisations (most of which have been skilfully brought

WHY FARMERS ARE POOR

	Million pounds	Per cent distribution
Sold at wholesale as milk	39,210	38.0
Skimmed or separated for sale of butterfat	31,176	30.2
Used for farm butter sold (chiefly retail)	2,010	1.9
Sold at retail as milk or cream	7,031	6.8
lotal sold	79,427	77.0
Used on farms where produced	23,705	23.0
Total milk produced on farms	103,132	100.0

DISPOSITION OF MILK AT THE FARM: 1937¹³

under the control of the big distributors), come between the individual farmer and the corporation.

In all the great metropolitan areas, a very few dairy companies dominate the market for fluid milk and the manufacture of milk products. These same giant dairy companies, together with the big meat packers who have stepped over into the manufacture of butter, dominate the outlets for butterfat. So subsidiaries of only five companies (National Dairy, Borden, Swift, Armour and A & P) run the Wisconsin Cheese Exchange where "the sale of a small quantity of cheese each week from one dealer to another established the price to be paid manufacturers of bulk cheese throughout the United States." ¹⁴

In the East, fluid milk markets are the farmers' chief concern. In Minnesota and prairie states west of the Mississippi, outlets for butterfat are of primary importance.

These two types of dairy farming are, however, inter-related, and the price of butterfat affects the price of fluid milk. For surplus butter and any sharp decline in prices paid to farmers for butterfat tend to reduce production of butterfat and to increase the amount of milk sent by these farmers to the condenseries. Such an increase in the supply of fluid milk brings direct pressure on the prices paid by the processors for such milk.¹⁵ The price of cheese also affects the prices of milk sold for other purposes.

While the drive by giant corporations for profits at the expense of the farmer and the city consumer is one basic source of difficulties to the dairy farmers, it is also true that here likewise the farmers' position is weakened by lack of balance between supply and effective demand. And this question goes deeper than the fact that more fresh milk would be consumed if retail prices were lower.

Amount of milk produced in the United States increased about 42% during the 1920's, chiefly through a marked increase in the average yield per cow. After 1929, when meat prices were slipping downward, more cows than usual were kept for milk production. This rapid increase in numbers of milk cows, which continued until the drought year, 1934, brought some decline in average output of milk per cow. Still, total production rose to a new peak during the very years when wages were being slashed and millions were thrown out of work. Exports of dairy products play a very minor rôle, but these also continued after 1929 a decline begun in the 1920's.

At the depth of the crisis, in 1932 and 1933, more milk was produced than ever before. This combination of a supply far exceeding mass purchasing power and a serious crisis in other branches of farming gave the distributors an opportunity to slash prices paid to the dairy farmer without fear that dairymen would shift to some other form of production and leave a shortage of milk. The average paid by distributors for standard grade milk to be sold as fluid milk and cream was pushed down from \$2.54 per 100 lbs. in 1929 to \$1.27 in 1932. For butterfat, farmers averaged 45.2 cents per pound in 1929 and 17.9 cents in 1932.¹⁶

Since 1934, the number of cows has declined rather sharply, but the total remains higher by more than a million head than it had been in 1930 or any earlier year. Many of the less productive animals have been eliminated, and with the cheaper feeds of 1937 and 1938 the average yield per cow has again approached pre-crisis levels. Milk production set a new record with its 108-billion-pound total in 1938.¹⁷

During the crisis, per capita consumption of fluid milk declined more than 10%. Even in 1929, the non-farm population was using far less fluid milk than the minimum which nutrition experts estimate is desirable for health: for children a quart a day and for adults a pint a day. But in 1929, children and adults together were averaging 3.14 quarts per person per week, which is less than a pint per person per day. By 1934 this average had dropped to 2.78 quarts per person per week, according to a nation-wide estimate for all cities and villages, by the Bureau of Agricultural Economics.¹⁸ These figures give too favourable a picture of milk consumption by workers and their families. A detailed study of 29,000 families with children attending public school in 59 cities showed for 1934 an average weekly consumption of whole milk *plus* the whole-milk equivalent of evaporated milk at the low figure of 2.44 quarts per person.¹⁹

Americans eat much less butter than Canadians. Oleomargarine, which lacks certain important food values found in butter, has been pushed successfully here in the low-income groups. So instead of the 35 pounds of butter per person per year, set as the minimum for a "liberal diet," ²⁰ Americans not living on farms are averaging only about 17 pounds per person per year.

If consumption of butter and fluid milk were brought up to the levels desirable for health, the so-called excess of milk produced by dairy farmers would disappear. Purchases of butter by the Federal Surplus Commodities Corp. have only touched the edges of this problem. They do not restore pre-crisis consumption, and even this was far below the minimum for health. Meanwhile the big companies have exploited the gap between "excess" supply and low purchasing power to increase their own profits at the expense of the farmers.

For farmers specialising in the sale of fluid milk, the excess milk (which is a genuine excess in relation to mass purchasing power) has brought a peculiar problem in the classified price system set up by the big distributors. This was in operation before state and federal governments began their attempts to regulate prices paid by distributors and processors to milk producers.

It has been accepted by regulating bodies as, supposedly, "stabilising" prices the year around and providing an outlet for the greater volume of milk produced in spring and summer. In actual operation it has meant that throughout the year, even in the months of smallest production, the farmer's daily output is divided by the distributor into two or more parts. Milk of identical quality brings two—and even three or more—different prices, according to the way in which the distributor states it is used.

That the farmers have been subject to tricky manipulation is suggested by the fact that after an audit by the N. Y. State Department of Agriculture and Markets, the Sheffield Farms Co. (National Dairy Products subsidiary) had to return \$250,000 to the milk producers for "inaccuracy" in records from 1932 to 1936.²¹ So also in the Philadelphia milkshed in 1934, milk was bought in a lower class but used in a higher class, according to findings of the Federal Trade Commission. Underpayments to the producers in one month totalled about \$16,000.²²

This system of milk classification, with lower prices for milk going into manufactured products, is a basic grievance of dairy farmers in the milksheds of all the metropolitan areas. They hate it, not only because they feel, as some one has said, that "There's many a gyp twixt the farm and the lip." They hate it, also, because they do not know from day to day how their output is being divided. Returns reach them with checks for the milk only some weeks after the milk has left their farms. And, thirdly, they hate it because they know that a device which might have been tolerable for a genuine seasonal surplus has been used to cut down their average return even in the months of small production.

Dairy companies, meanwhile, have helped themselves very well during the depression. While people have had to buy less meat, they have bought more cheese. Feeling that fluid milk was a luxury, they have bought greatly increased amounts of evaporated or powdered milk. And the big distributors, who are also manufacturers of milk products, welcome this increased use of cheese and other milk products. For they do not pretend to pay Class I price to the farmers except for milk sold at retail as fresh fluid milk or cream. National Dairy Products, for example, has fared especially well since 1933 because of its large production of secondary products which are its most profitable business. As a gossip column in the *Wall Street Journal* put it in July, 1939:

"Fluid milk continues to be the problem child of such concerns as National Dairy Products and Borden Co., with profit margins in this division negligible. However, fluid milk operations absorb a large part of overhead costs, making it possible for these companies to manufacture butter, cheese and other products at prices attractive to the consumer. The most important factor in the satisfactory earnings of the dairy companies so far this year has been the steady expansion of unit sales, centering about cheese, ice cream and other products manufactured from so-called 'surplus milk.'"²⁸ Even on fluid milk, the big companies have no cause for complaint. In New York City, for example, the Bennett report published in March, 1938, showed that they were obtaining the following ratios of profit to sales: 13% on Grade B milk delivered to the consumer; 16% on Grade B milk delivered to retail stores; 21% on Grade A milk and 27% on Grade A vitamin D milk delivered to the consumer.²⁴

In the New York milkshed the distributors have passed on to the farmer a declining share in the consumers' milk dollar. From 1923, the year when National Dairy Products Corp. was organised, through 1938, the retail price to New York City consumers declined less than

AVERAGE CENTS PER QUART OF NEW YORK CITY MILK 25

		Farmers' wholesale price	
	Retail price	Class I milk	All milk
1923	14.8	6.4	5.3
1932	12.0	3.8	2.6
1938	13.1	4.8	3.5

INDEX OF PRICES, NEW YORK CITY MILK

		Farmers' wholesale		
	Retail	Class I milk	All milk	
1923	100	100	100	
1932	81	59	49	
1938	89	75	66	

20%, even at the depth of the depression, while prices received by farmers declined 41% for Class I milk and 51% for all milk, Class I and "surplus" combined. At the end of the period, consumers were paying only 11% less than they had paid in 1923, but farmers were receiving a net return one-third less than in the earlier year. Assuming that the farmer received a Class I price for all milk sold as fresh milk by the distributors, his share of the consumer's dollar dropped from 43.2 cents in 1923 to 31.7 cents in 1932 and recovered only to 36.6 cents in 1938.

For milk sold to condenseries, price margins have also moved against the farmers. During every month of 1938 farmers received a lower price for their milk at condenseries than in the same month of 1937, according to Federal Trade Commission data. Manufacturers' average annual selling prices on the condensed milk manufactured

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from 100 pounds of whole milk were lowered by less than 1%, from \$4.34 to \$4.31. Manufacturers' selling prices of evaporated milk dropped by 7% from \$2.61 in 1937 to \$2.43 in 1938. But the prices paid to farmers by both types of manufacturers fell 20%, from an average of \$1.57 per 100 pounds in 1937 to \$1.25 in 1938.²⁶

Price spreads between farmer and consumer on total milk production and total retail output of milk and milk products have been estimated for the country as a whole by the Bureau of Agricultural Economics. On this broad basis, dairy farmers' average share in the retail dollar (including both milk and milk products) had dropped from the 54% to 56% of the years 1913 to 1920 to a low of 37% in 1932 and 1933. Rising somewhat when the federal government entered the field of regulating milk, it dropped again from the 48% of 1936 and 1937 to 43% in 1938.²⁷

Difficulties of arriving at exact estimates of the situation are illustrated by data in Attorney General Bennett's Report on the Milk Industry of the State of New York, to which we referred above. Mr. Bennett charged that both Borden's and Sheffield's (of National Dairy Products Corp.) issued misleading statements of their profits and of payments to the farmers. When Borden's claimed that it was paying the farmer 48.1% of the consumer price, or 6.21 cents out of the consumer's 12.93 cents for a quart of milk, the actual price paid for Class I milk "was considerably less than 5 cents per quart." And since the Class I milk was less than half their total supply, the actual price received by the farmers for their milk—all of standard quality was nearer 3.6 cents per quart.²⁸ In spite of such difficulties, the Bennett report emphasises that "Farm prices for milk have not kept pace with the retail prices paid by the consumer." ²⁹ (Our italics.—A.R.)

It is also clear that throughout the crisis years the largest ten milk processors and distributors maintained, as a group, a high average net return on their investment. Even in 1933, their combined net return was 4.4% on total capital in the business, and for the six years, 1929 to 1934 inclusive, they averaged a net return of 9.6%.³⁰ These net rates of return do not include the large salaries received by corporation heads. President Thomas H. McInnerney of National Dairy Products Corp., for example, drew \$108,680 in 1936, \$150,560 in 1937, and \$150,460 in 1938. A. W. Milburn as president of The Borden Co. had \$95,000 in 1936 and \$76,266 in 1937. His successor, Theodore G. Montague, received \$60,000 in 1938.³¹ These are salaries (including bonus) and do not include such interest or dividends as the officers may receive as a share in the "net return" on investment noted above.

Including as profit the "high bonuses to high officials and salaries above \$20,000, and excessive charges for obsolescence and depreciation," auditors of the Agricultural Adjustment Administration reported the following percentages of net profit made by the larger distributors handling from two-thirds to 90% of the milk in St. Louis, Chicago, Boston and Philadelphia: ³²

PERCENTAGE OF NET PROFIT RECEIVED BY LARGE MILK DISTRIBUTORS IN FOUR CITIES: 1929-33

	1929-33	1933
St. Louis	14.6	7.3
Boston	22.5	16.3
Chicago	25.8	10.9
Philadelphia	30.8	21.7

National Dairy and Borden are both large corporations, included in any list of the largest 200 in the country. They have grown by taking over smaller companies in many different parts of the country. National Dairy Products Corp., organised in December, 1923, had before the end of 1936 acquired 358 companies. Borden in five years from 1928 to 1932 inclusive acquired 207 companies.³³ Their net profits in 1939 *after* depreciation, interest, and all taxes except federal income tax, were \$13,034,157 and \$7,979,837, respectively.

In comparison with the total milk production in the country, or even with the total milk sold by farmers, no one distributor or processor appears to hold a dominating position. National Dairy handled about 10% and Borden about 7% of the milk (and milk equivalent of butterfat) sold by farmers at wholesale in 1934. Since then their proportionate share of the total output has apparently increased. But when we consider separately different divisions of the dairy industry and the several important metropolitan areas in the country, the true monopoly power of the great companies becomes clearer.

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LIVESTOCK AND MILK

PERCENTAGES OF SPECIFIED PRODUCTS SOLD BY LARGEST THREE SELLERS, AMONG DAIRY COMPANIES AND MEAT PACKERS SEPARATELY: 1934³⁴

	Per cent	
Product and	of stated	
type of company	product	Largest three sellers
Fluid milk and cream		0
Dairy companies	15.6	Borden, National Dairy, Beatrice
Butter	-	, , , , , , , , , , , , , , , , , , , ,
Dairy companies	16.3	Borden, National Dairy, Beatrice
Meat packers	16.8	Wilson, Swift, Armour
Cheese (excl. cottage,	pot,	
and bakers)		
Dairy companies	42.7	Borden, National Dairy, Fairmont
Meat packers	36.2	Swift, Armour, Kingan
Condensed and evapora	ated	,,
milk		
Dairy companies	44.3	Carnation, Pet Milk, A & P
Meat packers	7.2	Swift, Armour, Jacob Dold Packing
		, , , , , , , , , , , , , , , , , , , ,

National Dairy also accounted for more than 21% of the total quantity of ice cream manufactured for sale in the United States in 1934, and for approximately one-third of the total cheese business of all kinds.³⁴

In the New York metropolitan area, Borden's and Sheffield's (of National Dairy Products) handle between them 76% of all fluid milk sold at retail.³⁵ In the Baltimore and Washington (D.C.) milksheds, National Dairy Products purchased in 1934 about 42% of the available milk supply; in the South Atlantic states about 33%; in Alabama, 25%; in Ohio and Michigan, about 20%.³⁶

Wherever a high degree of concentration has developed in the distribution or processing of dairy products, there we find also a high degree of specialisation by farmers producing milk. This is due to various factors analysed in earlier chapters. Practically it means for the dairy farmer that the tighter are the monopoly forces with which he is confronted, the greater also is his dependence on milk as his primary commercial product.

Milk producers have long been subject to regulation by state and municipal authorities supposedly concerned with standards of clean-

liness and quality of milk. As soon as these require that milk shall be pasteurised, the pasteurisation plants—which can be operated at low cost only for large volumes of milk—become one important factor in the control of distribution by large companies.

Much more recent have been attempts to regulate prices paid to the farmers. Here state action has frequently proved inadequate, since most of the metropolitan areas draw their milk supply from a milk-shed that includes more than one state. When the first Agricultural Adjustment Act was passed in May, 1933, milk was included as a basic farm commodity, subject to regulation by the federal government. This included authority for control of production so as to reduce the "excess" supply, out of balance with market demand. And it made possible "marketing agreements" between producers, distributors, and the federal government. After certain sections of the first AAA had been thrown out by court decision, milk was explicitly included in the Agricultural Marketing Agreement Act of 1937.

Secretary Wallace and the Agricultural Adjustment Administration moved first in the field of marketing agreements, intending to set up complete schedules of prices paid to farmers and retail prices charged to consumers. But every possible difficulty was raised by the leading companies distributing fluid milk and cream, in an effort to complicate the study of costs which the administration proposed to make as a preliminary to retail price-fixing. As Secretary Wallace put it, in an address to dairy farmers in January, 1934:

"We suspected that the distributors were making fairly handsome profits as it was; we were not inclined to raise the ante for them, or to protect them against competition beneficial to consumers and not hurtful to farmers, which might lower those profits." ⁸⁷

Mr. Wallace also discovered that in the discussion of measures under the AAA, the leaders of the largest milk co-operatives presented the very arguments desired by the big distributors. They were opposed to the examination of company accounts as a preliminary to retail price fixing.

"... we were urged by some of the most influential co-op leaders to set up the complete price schedule first, slap on a license, and examine the books later and at leisure.... It became a strange spectacle, this sight of farm folks lining up with the distributors." 37

Mr. Wallace seems loath to admit that the dairy co-operatives have become the tools of the big distributors.

A few such agreements were set up, however, only to be revoked by the government early in 1934. This phase of federal regulation has not yet been pushed to definite action in the field of fluid milk distribution. One important demand of certain state branches of the Farmers' Union, and of the Dairy Farmers' Union in New York State, concerns this whole question of regulating distributors' retail prices and limiting their profits. But the administration has avoided any head-on collision with the large monopoly distributors.

In fixing prices paid to farmers under the marketing agreements and orders on fluid milk distribution, the AAA has followed the classification system to which we have already referred. But the government has attempted to name prices only somewhat higher than those the distributors were already paying. They have not attempted to enforce a full "parity" price, on the ground that without some restriction of output such a price would increase the excess supply and create a new marketing crisis.

Marketing agreements and federal orders may require that payments to the farmers be based on the pooling of all milk of a given quality received from all farmers. When such pooling applies to a group of distributors it must be approved by two-thirds of the farmers from whom they buy (or by farmers producing two-thirds of their total volume). When the pool is confined to only one distributor, it must be approved by three-fourths of the farmers or by farmers producing three-fourths of the milk that this distributor purchases.* This is an attempt to meet the difficulty felt by small producers who believe that the classification system has worked especially against their interests. Many of them have been convinced that distributing companies commonly allowed a higher quota of Class I milk to large producers than to small. The small producer is now protected individually by a public report of the classification of all milk used in his pool. And the com-

* In all the voting by farmers themselves on the federal regulations, the members of co-operatives have no individual voice. The co-operative is allowed to speak for all its members as a solid block, without regard to differences among the members. pany records on which it is based are supposed to be subject to audit by the federal administrator.³⁸

After the strike of New York dairy farmers, led by the Dairy Farmers Union in August, 1939, which withheld for a few days more than half the fluid milk supply for New York City, an unofficial agreement was reached with the distributors promising the farmers that the blended price for all classes of milk would not fall below \$2.15 a hundred pounds. But the price schedule under the federal order issued shortly afterwards contained no reference to blended price. And in their settlement for September milk, the big distributors repudiated their agreement.³⁹

When the New Deal proposed some limitation of milk production, under the authority of the original Agricultural Adjustment Act, as a basis for higher prices to the dairy farmers, it was met with a vigorous demand for certain other measures. Spokesmen for the dairymen wanted restriction of the oleomargarine industry, high tariffs placed on all foreign fats and oils, and a guarantee "that no land withdrawn from other basic commodities could or would be used in the slightest degree to produce dairy products." ⁴⁰ * In 1933 unsold butter was piling up and the farm price of butterfat had declined even more than the farm price of fluid milk. All proposals for direct production control in dairy farming were shelved when important sections of the original Agricultural Adjustment Act were annulled by the Supreme Court in January, 1936.

A depressing carry-over of butter and other manufactured products in 1933 and 1934 was indirectly attacked by a purchasing programme which helped to give some support to prices and provided some small addition to the food supply of the several million families on relief.** Up to July, 1938, these purchases had included more than 95.9 million pounds of butter, more than 64.1 million pounds of dry skim milk, about 1.7 million cases of evaporated milk, over 22.6 million pounds of cheese, and about 12.5 million quarts of fluid milk. With record pro-

** This was carried out through the Federal Surplus Relief Corp., which became in November, 1935, the Federal Surplus Commodities Corp.

^{*}The Agricultural Adjustment Act of 1938 included a provision that conservation payments to farmers are conditional upon their avoiding undue competitive expansion in dairy, livestock and poultry production. (Agricultural Adjustment Administration, report on *Agricultural Adjustment*, 1937-38, p. 19.)

duction of butter in 1938-39, and a new slump in the farm price of butterfat, the Federal Surplus Commodities Corp. purchased during that fiscal year more than 122 million pounds of butter, or about 7% of the total creamery production.

Under the New Deal, certain aspects of the milk problem have figured in important court actions. Cases from New York State and from Boston, challenging the constitutionality of the Agricultural Marketing Agreement Act of 1937, were carried to the Supreme Court in 1938. The Act and the administrative actions taken under it were upheld in decisions rendered June 5, 1939.⁴¹

In the Chicago milkshed in November, 1938, the Department of Justice charged The Borden Co. and nine other milk corporations with "conspiracy to fix prices and control the supply of fluid milk in the Chicago area," in violation of the Sherman anti-trust law. Chicago was chosen for the prosecution as "representative of the conditions in the milk business all over the country." The prosecution also charged National Dairy Products Corp., The Borden Co., other ice cream manufacturing concerns and the International Association of Ice Cream Manufacturers with a nation-wide conspiracy to restrain the sale and use of "counter freezers" with which retailers, hospitals, schools and other institutions could make their own ice cream. The Federal Court in Chicago in June, 1939, ruled against the government on the ground that all regulation of milk and milk products had been placed in the hands of the Department of Agriculture. The Department of Justice carried the case to the Supreme Court which reversed the lower court's decision.42

CHAPTER XI

Back of the Farmers' Price Problem

A HUNDRED years ago people were still repeating the fears spread by Malthus that population would soon outgrow its food supply: How could the expanding army of industrial wage workers and the rapidly increasing city population possibly be fed? Before the nineteenth century had ended, such fears were completely out-dated. American farmers had not only done their historic job of supplementing the supplies of grain and cattle raised in western Europe. Their exports had actually driven tens of thousands of European peasants into greater poverty because the relatively costly European production had become "excess" in the world of trade. Then the American farmers who had come to depend on export markets began to feel the pinch of competition from the development of modern agriculture (aided by American agricultural machinery) in newer unsettled countries and in thickly settled "backward" areas invaded by European and American business men and their agrarian technicians.

To-day we know that the world has land enough to produce, with the methods of scientific agriculture, an indefinitely expanding volume of grain and textiles and fruit and meat and milk. The fears of Malthus and his followers are scarcely remembered except as one reminder of the long, difficult road that the human race has travelled.

Our basic problems to-day are to distribute the abundance available in this country and elsewhere and then further to develop the productive forces which are at hand to supply all the needs of those who are ill-clothed, ill-fed, and ill-housed. But meantime we are confronted with the immediate needs of a farm population equipped to produce far more than the present market can absorb.

Hitherto, in the capitalist countries, agricultural production has been increased by the forces of individual competition. Methods followed by the more prosperous farmers and by capitalists seeing a chance of profits from large-scale farming have cut down the cost of production. They have increased the productivity of labour on the land and they have made possible higher yields per acre. Volume of output has grown much faster than the numbers working on the land. In the long view, this is immensely important to the human race. It releases more and more of the population for other productive work. Being assured of the basic materials for subsistence, more energy can be devoted to activities required for making life comfortable and beautiful. Abundance not only of food but of all the technique of modern life becomes possible for the first time.

During the first stages of the technical revolution in agriculture this "release" of more and more of the population from work on the land meant no deep lying crisis. It added millions to the proletariat, but capitalist industry was expanding. In this country it continued to expand even after the collapse of the World War boom. For American capitalists were financing the reconstruction of European countries devastated by the war, and the wealth accumulated from war profits gave a sharp stimulus to construction and manufacturing for the market at home.

Until the end of the war, industrial expansion involved increasing employment. But the end of the World War boom marked a turning point for both industry and agriculture. In the 1920's, capitalist industry entered a new stage of expanding production with a decline in the number of workers employed. And agriculture, with its tractors and combines and the newest developments in mechanisation and agricultural science, also began to produce more with a slight reduction in total numbers working on the land. Even before the 1930's brought a sharp decline in mass purchasing power, farmers could produce more than the market could buy. In the 1920's, the combination of declining cost of production and some excess of output beyond market demand tended to push down the prices of farm products. Further, farm products were increasingly dependent on outlets dominated by monopoly forces in trading and processing. And outside of this field, wider areas of non-farm production were dominated by small groups of large corporations maintaining controlled prices. Prices received by farmers were bound to be lower than formerly in relation to other prices.

Backward, high-cost farms were hard hit. Total number of farms declined by 160,000—a small percentage, less than 3% of those in operation in 1920, but a most significant trend. And in spite of the "prosperity" of the 1920's these farmers who left the land found hard sledding in other occupations. For since productivity of labour in all other phases of industry (manufacturing, transportation, construction, communications) as well as in agriculture was rising at a record pace, it was left to trade and the so-called "service" occupations to absorb all the increasing population that needed work away from the land. This they could not do, in spite of rapid expansion, and the latter 1920's saw the beginnings of chronic mass unemployment.

For small farmers remaining on the land, the increase in volume of low-cost farm production was a major disaster. In many lines of farming, the small farmers were practically driven off the market: "surplus" farmers in the eyes of the capitalist world which can think and function only in terms of selling and buying for a profit.

Prices of grains and cotton affect both the farmers who raise them and the speculators who handle them. The fact that they had begun to decline rather sharply several months before the big crash of 1929 might have been a warning signal to the capitalist world. For the "weakening" of markets for staple farm products, together with the high rate of foreclosures on farm mortgages and the long-continuing wave of failures among country banks, were important secondary factors in the economic crisis.

When this crisis broke upon the world, it reacted immediately upon agriculture. Workers' purchasing power was slashed with wage cuts and unprecedented mass unemployment. They ate less, and cases of actual death from starvation were reported in a number of American cities.

Farmers normally respond to low prices by planting a somewhat smaller acreage and farrowing fewer hogs. But such a deliberate decline in farm output is always far less drastic than the cuts in production practised by industry during a crisis. For industrial companies can cut their costs to a minimum by simply throwing their workers on the street. As companies, they have reserves for just such emergencies. And it is a basic principle of capitalist industry to withhold production until you can be reasonably hopeful of selling your product.

To the working farmer such tactics are almost inconceivable. Why should he deprive himself of employment and possible income? He may cut down his operations and reduce the amount of hired help, but with his set-up of animals and crop land and equipment that he operates himself in a year-long cycle, he must continue to produce. When prices fall very sharply, the farmer tends to increase production for home use. But he must also raise something to sell. He has no adequate reserves to pay his rent or his mortgage interest and taxes. And since he produces things that human beings absolutely need, he may continue his regular production for the market since he naturally believes that another year will be bound to see a revival of demand.

Besides, it may happen that nature is unusually kind to the farmers' crops the very year that they cut down their acreage. We have spoken in an earlier chapter of the record yield of cotton in 1937. Or farmers accepting restrictions on acreage (as most of them have done under the New Deal) may turn generally to better seeds. So in the restriction of corn acreage, far more hybrid corn has been planted than ever before, and the average yield per acre has risen sharply.

Actually, from 1929 to 1932, industrial production dropped 46% but the total volume of farm output was maintained almost without change.¹ During the same years the price index of non-farm commodities declined only 23% but the index of prices received by farmers dropped 55%. From the capitalist viewpoint, the moral was plain: Restrict farm production and farm prices will rise. And under the New Deal, farm prices *did* rise, bringing an increase in gross farm income without a corresponding increase in farm output. Since they had dropped further than non-farm prices, their recovery was relatively greater, even if they remained somewhat lower than non-farm prices in relation to the 1929 levels.

For both workers and farmers this was only a partial recovery. And in 1937-38 a new depression brought a fresh decline in prices. At least twelve million men and women were still unemployed in 1939, accord-

ŀ	Prices received by farmers *	Wholesale prices excluding farm products and food	,
1929	100	100	
1932	45	77	
1933	48	78	
1934	62	86	
1935	74	85	
1936	78	87	
1937	83	93	
1938	65	88	
^a Bureau of Agricultural	Economics.	^b Bureau of Labour Statistics.	

ing to estimates of Labour Research Association, and even a few capitalists were beginning to admit that under our present system mass unemployment will continue indefinitely. The purchasing power of the gross farm income remains below its 1929 level, and the working farmers are convinced that at least their wheat and milk and cotton and fruit do not yet bring enough to cover the full cost of production.

But would farm recovery to the level of 1929 solve the problem of markets and prices? Since the severe and long-continued crisis of the 1930's, we tend to look back on 1929 as the end of a golden era. Readers who have followed our argument know that for the farmers the golden era-if it ever existed-had certainly ended with the collapse of the World War boom. Restoration of the later "prosperity" of the 1920's would leave still unsolved the problem of the very poor small farmers, crowded to the edge of commercial production; and the problem of the smaller commercial farmers operating with backward equipment and pouring out their energies in hard work through exhausting hours of labour. It would not solve the problem of the middle farmers who have invested in modern equipment adapted to a larger scale of operation than they have ever been able to achieve. We repeat, that while the problem of "excess" production and "surplus" farmers has been greatly intensified by the crisis of the 1930's, it was already developing in the "prosperity" of the 1920's.

And even in 1929 great masses of workers—as well as the poor small farmers—had less than they needed for vigorous health and comfort. Serious undernourishment was widespread, even with our boasted
"American standard of living." Farmers were producing a little more than the market could buy, and at the same time several million persons had less than they needed of milk and butter, eggs and meat, fruit and vegetables. Farmers were not producing enough to meet these needs.

From the "liberal diet" worked out by experts at the Department of Agriculture, a group of economists have reckoned the quantities of various foods that were needed by the American people in 1929. These they compare with the quantities actually produced on American farms in that year. They show that production of the cheaper foods was more than sufficient. Flour and cereals, potatoes, dried peas, beans and nuts, and fats other than butter were produced beyond the demands of a liberal diet. But milk, butter, fresh vegetables and fruit, beef, veal, lamb and mutton, poultry and eggs were markedly short of the supply needed for a well-balanced healthful diet. The slight over-supply of pork and fish was more than offset by a shortage of the more nourishing meats.

COMPARISON OF U.S. PRODUCTION WITH LIBERAL DIET NEEDS: 1929² (millions of pounds)

			Deficit (—)
	Production	Budget	or excess $(+)$
Flour, cereals	30,704.4	12,500	18,204.4 +
Whole milk	98,698.0	176,375	77,677.0 —
Butter	2,142.3	4,375	2,232.7 —
All potatoes	20,405.7	19,375	1,030.7 +
Dried beans, peas, nuts	2,167.1	875	1,292.1 +
All other vegetables	23,840.4	30,750	6,909.6 —
All fresh fruits	24,293.9	45,125	20,831.1 —
Fats (other than butter)	4,708.0	1,875	2,833.0 +
Sugar and sugar products	5,038.6	7,500	2,461.4 —
Beef	4,849.4	7,000	2,150.6 —
Pork	8,669.6	8,375	2 94.6 +
Lamb and mutton	681.5	750	68.5 —
Veal	774.8	1,000	225.2 —
Poultry	1,574.1	2,250	675.9 —
Fish	2,140.2	1,625	515.2 +
Eggs (individual)	31,276.6	45,000	13,723.4 —

Part of the excess flour and lard was exported, and the sugar deficit was filled by imports, not included in the table.

Similar computations could well be attempted for cotton, and it is fairly obvious that the construction and current purchases required to supply comfortable housing and adequate household furnishings for the entire population would at least take up the "surplus" cotton no longer purchased by foreign textile mills.

Such computations point the way to the only possible solution of the problem for the farmers who now produce "excess supplies." Their present poverty is bound in with the poverty of city masses, and this in turn is created by the capitalist system of production and distribution. Technical advance under capitalism has given us the possibilities of abundance. But the underlying structure of capitalism has made it impossible to produce and distribute this abundance. We return to this again.

Is there, in the meantime, no solution for the farmers' problem of markets and prices? Must the small farmers and the high-cost commercial producers suffer extreme poverty until the whole system is changed? Some immediate easing of the situation is possible. The necessary measures would be fought by reactionaries at every step, and with every weapon of propaganda and of state power, but American farmers and American workers have never been afraid of struggle on issues that deeply and immediately affect them. The following measures are examples of the immediate aims toward which common action might be directed. If this were well organised and aggressive, it could, we believe, bring some relief even under capitalism on the issue of markets and prices.

Farm prices could be raised and retail prices lowered if the profits of giant middlemen were genuinely limited. The farmers' share of the city workers' food dollar was 53 cents in 1913-15 and only 40 cents in 1938.* Working farmers and wage workers are both vitally

* Value of 58 Foods Consumed Annually by Typical Worker's Family.

	Farm value in	Retail value in	food dollar. in
Average	dollars	dollars	per cent
1913-15	135	256	53
1929	195	415	47
1932	88	2 70	33
(Note continued on n	ext page.)		

concerned for much stricter regulation of monopoly traders and processors. In this connexion, it would be abundantly worth while if certain facilities like grain elevators; public stockyards; cotton warehouses; creameries and pasteurisation plants, could be set up by federal, state or municipal governments as yardstick competitors to those operated by wealthy firms and their agents. Sale of milk at city health stations in New York City offers a useful example of one phase of such activity. Another is the TVA production of high-grade fertiliser. All attempts at regulation of prices should take fully into account the costs of the smaller producers, and limitation of profits to the large fully capitalist farms.

Also, nationalisation of railroads, with a minimum of compensation to the present owners, would make possible a reduction in freight rates, directly benefiting both farmers and city consumers.

Working farmers and wage workers can unite in demanding heavier federal taxes on large salaries and capitalist incomes, and on the reserves of great corporations. Such increased revenue could be applied directly to the purchasing and distribution of "excess" farm supplies, raising the level of diets for families on relief.

Restrictions of farm output must give way to broad constructive measures to increase employment and mass purchasing power. "If the country as a whole were fully at work . . . consumer expenditures for food would be perhaps 5 billion to 6 billion dollars greater and probably half of this sum would be passed on to farmers." This is the sober estimate of the Bureau of Agricultural Economics.⁸ Such measures would benefit both working farmers and city masses. They should include a more determined, nation-wide attack on the problem of housing, which offers one key to increased employment and industrial activity. They must not be held back by capitalist pressure against competition with private industry.

All working farmers and all wage workers have a strong common (*Table continued from note on previous page.*)

1034	108	205	37
-2,54	128	221	42
1955	130	55*	
1930	152	342	4 4
1937	160	353	45
1938	130	321	40

Source: Agricultural Situation, February, 1939.

interest in demanding for wage workers a higher standard of living. The market for farm products is directly limited by the low wages prevailing throughout the South and in most of the unorganised industries in every region. The more progressive farm leaders fully realise that even if some farmers had to pay more for their hired help, this outlay would be more than balanced by the benefits to all farmers from higher mass purchasing power throughout the country.

The problems of working farmers and city masses are bound up together. Neither group can prosper long at the expense of the other. They need one another's products. They need one another's purchasing power. Both are exploited by the economic forces which underlie our capitalist system. Both have a common interest in restraining the operation of those forces. Only by strong united action can this be accomplished.

CHAPTER XII

Must Farmers Be Poor?

FAIR prices and adequate market outlets for his products are absolutely necessary to the farmer's prosperity, but these are only one phase of his problem. Quite as basic are the terms under which the farmer occupies his land; the equipment with which he raises his crops and cares for his livestock; and his general situation as to "capital," debt, costs and income.

One or another of these aspects of the farm problem, and sometimes several together, have figured in earlier farm crises. It might appear that the 1920's and 1930's have been merely one more of the recurring periods through which American farmers have suffered and struggled. But a closer study reveals that these old factors in the farmers' problem now operate against a new background of general capitalist decay.

Industry now expands too slowly to utilise profitably the vast accumulations of the wealthy. Production increases without a corresponding increase in total employment. Idle equipment, able to produce abundance, stands in the midst of idle workers who cannot find jobs. This hideous situation which formerly recurred only at the low point of the capitalist business cycle has become a chronic plague for which capitalism has no remedy. Within agriculture, productivity of labour has increased—and is still increasing—without a corresponding increase in markets. The poor farmer and the farmer's son whose hands are not needed on the farm can no longer turn hopefully to industry for a living.

Speeding up of industrial production for the American war programme had not up to early 1940 appreciably reduced unemployment. It had, on the other hand, brought a renewed drive against labour standards. As for the farmers, no important increase in exports is predicted for any near future. Farmers would find their problems intensified by any new war boom, with the reaction and crisis which inevitably follow. They have not forgotten that although farm prices and gross farm income made an all-time record in 1919, the next two years saw prices drop by 41% and gross farm income by 47%. American participation in the second imperialist war in Europe would only increase the farmers' difficulties. Farm organisations have registered their hope for an early peace and strong support of genuine neutrality in the United States.

All these elements of general crisis in the capitalist system make more serious the farmers' problem in relation to each separate adverse trend. They give a new background to the situation of working farmers as an exploited group within the capitalist world.

What Farmers Have Wanted

We have not attempted any historical record of earlier farm crises. Such a record lies outside the scope of our analysis. But we cannot overlook the fact that the outstanding struggles of the farmers during the past hundred and fifty years have dealt with issues closely akin to certain issues in the farm crisis since the first World War.

So Shays' Rebellion in 1786 was the culmination of several years of acute distress among farm debtors in Massachusetts. They resented the contrast between their extreme poverty and insecurity and the luxury of merchants, lawyers, and judges. For even then the farmers bore an undue share of taxation. Interest on their mortgages added to the wealth of the city nabobs. Lawyers and judges were kept busy with foreclosure proceedings and debtor cases that sent hard-working farmers to jail.*

* Under the leadership of Daniel Shays, farmers took up their muskets and occupied courthouses so as to break up the proceedings against debtors. They even tried to seize additional guns and ammunition from the Springfield arsenal. Defeated in their armed uprising, the little group of militant farmers had such wide popular support that their petitions for pardon were granted and judges became a bit more wary in ordering foreclosures and jail terms for the rural debtors.

"Anti-Renters" in the Hudson River Valley from 1839 to 1846 carried on an open political struggle, combined with very vigorous direct action against sheriffs and their deputies, seizing them and burning the papers they carried.* This was primarily a tenants' revolt against the oppressive leaseholds enforced by the Van Rensselaer estate and other large landowners. A localised struggle, it roused such sympathy among farmers throughout New York that the state constitution was revised in 1846 to abolish *future* life-time leaseholds. Also, under pressure of the Anti-Renters' political strength, the legislature passed several measures alleviating some of the worst abuses for those who remained bound by existing leases. Again, as in Massachusetts more than half a century before, one of the first acts of a new governor (in January, 1847) was the pardoning of all the 18 anti-renters who were still in prison, including those who had been condemned to death.¹

Conflict had developed also between pioneer settlers west of the Alleghenies and rich landowners who had been favoured with huge free grants. This conflict was voiced in the newer state legislatures, several of which asked Congress for federal action on behalf of the settlers. Such action was endorsed by groups of organised wage workers in the older states. The first "free land" bill was introduced by Senator Benton of Missouri in 1825, but all such measures were consistently opposed by the slave-owning South. As a compromise, in 1841, the Pre-emption Act gave squatters the right to purchase, at a fixed price of \$1.25 an acre, title to land they had occupied. Not until the second year of the Civil War did the Homestead Act of 1862 open the public domain to actual settlers at nominal fee. After the war this principle was seriously modified when great areas of the public domain were withdrawn from free settlement and given as perquisites to the companies building railroad lines west of the Mississippi.

In the South, during the Civil War and afterwards, a widespread movement developed among the former slaves who demanded free possession of small farms cut from the land of the old plantations. Their desire for free land in the old cotton country was recognised and supported by a few of the Northern leaders. But it was generally op-

^{*} Some actual fighting resulted in deaths on both sides, and one county was declared to be in a state of insurrection. More than a hundred farmers were arrested, two were sentenced to be hanged, and at least five were condemned to life imprisonment.

posed and completely defeated. This struggle, which was bound up with the Negroes' struggle for full citizenship and genuine democracy, has been commonly distorted in the histories of that period. The unsolved land question, and the problems arising from the sharecroppers' status and the vicious Jim Crow principle, remain a central issue in the old South.²

After the Civil War, the decades of the 1870's and 1880's brought a fresh increase in the farmers' debts, for prices of commodities were declining and (in most sections of the country) prices for land were rising. Even then, in the South, the smaller white farmers organised in protest against "the low prices, the pernicious crop-lien system, and the tyranny of the country merchants." ⁸ In the prairie states, grain elevators and railroad corporations, banks and corrupt legislatures were the chief targets of the farmers' wrath.*

New farm organisations like the National Grange and the Farmers' Alliance, which raised political issues but abstained from organised political action, failed to satisfy the western farmers as the crisis deepened with the dry years and crop failures that began in 1887. When the People's Party was formed (in Kansas in 1890, nationally in 1891), it grew rapidly enough to poll more than a million votes in the presidential election of 1892.

The Populists (as the People's Party and its sympathisers were known) reflected a new stage in economic and political development within the United States. They saw the conflict between the farmers and the monopoly forces of the great new corporations and interrelated banks as one major source of the farmer's increasing difficulties. They recognised that "The interests of rural and civic labour are the same; their enemies are identical." ** And they made certain demands and endorsed certain proposals which set the line for much of the anti-monopoly effort up to the present day.⁴

*Farmers played an important rôle in helping to obtain the beginnings of federal railroad regulation in the Interstate Commerce Act of 1887 and the first federal antitrust law in 1890.

****** By way of aid to labour, the Populists proposed real enforcement of the 8-hour day for workers employed by the government. They called for a boycott of "the tyrannical combine of clothing manufacturers of Rochester" in order to aid the "righteous contest" of the Knights of Labour. They spoke vigorously for abolition of the "large standing army of mercenaries, known as the Pinkerton system." Less enlightened was their endorsement of the demand for restricted immigration.

At their Omaha convention in 1892, the Populists called for government ownership of railroads, telegraphs and telephones. They went on record for a graduated income tax, for direct election of United States senators, for initiative and referendum, and for the "Australian or secret ballot." They opposed any federal subsidy or national aid to any private corporation for any purpose.

Mortgaged homesteaders in the prairie states had been losing their farms in a wave of foreclosures exceeded only in the post-World War crisis. But the Populists had no clear approach to this problem. Like many Mid-West progressives to-day, they had the viewpoint of petty capitalists who resented vigorously the pressure of great aggregations of capital but never questioned the underlying principles of capitalist operation. So they demanded that "All lands now held by railroad corporations in excess of their actual needs, and all lands now owned by aliens, should be reclaimed by the government and held for actual settlers only."⁴ Just like the single taxers, who participated in the Populist movement, they condemned all holding of land out of production for speculative purposes. But they assumed that farm land in use should be privately owned. Mortgages, they felt, would involve no problem *provided* farm prices were reasonably high and interest on loans was reasonably low.

So far as prices were concerned, they blamed a scarcity of currency for much of their difficulty, and for this they held the privately owned banks responsible. So their first desire, in relation to prices, was to weaken the power of the private bankers and to increase the volume of money in circulation.

As a class burdened with debts, they turned toward inflation, thinking that if prices received for their products would only rise they could meet the debts incurred when prices were lower. To-day it is clear that neither free silver, nor any deliberate devaluation of the dollar, could have solved the farmers' problem. Even if farmers' markets were expanding, the controlled prices that farmers pay would be pushed up by the trusts at a faster pace than the competitive prices the farmer receives. New and heavier debts would pile up to replace those the farmer might liquidate. Now when farmers' markets are limited, and tending to decline, the downward push of "surplus" products is stronger than the upward push of a moderate inflation. Inflationary measures of the New Deal in 1933 did hasten recovery of farm prices from the lowest point of the crisis, but they did not prevent a fresh decline four years later. Throughout the 1930's the disparity between prices received and prices paid by farmers was sharper than it had been before.

Populists of the 19th century failed to find a remedy for the farmers' ills. They did not see that problems of price and debt involved issues fundamental to our whole economic structure. They never questioned private ownership of farm land. They never grasped the inner relationship between agriculture and the banks and corporations. But although they did not understand the full complexity of the situation, the Populists left a correct tradition of sharp and permanent conflict of interest between the farmers and the forces of finance capital. They realised that farmers and workers have a common interest.

Throughout the 1890's political ferment bubbled up in all the farmers' organisations. They talked of many other things not included in the Populists' platform of 1892. They wanted federal farm credit that would make them (they believed) independent of the privately owned mortgage and insurance companies and banks. They pushed their efforts toward co-operative marketing. Both federal credit and co-operatives have been greatly developed since the farm crisis of the 1890's, but none of the measures obtained by the farmers has solved their problems.

What the Farmers Have Won

Mortgage loans to farmers were provided under the Federal Farm Loan Act of 1916. Only one distinctive feature was included: provision for amortisation (gradual paying off) of the mortgage through instalment payments on the principal. Capital for the loans was raised by sale of tax-exempt bonds, and the mortgages were issued and administered according to methods current in the world of private banking. The government had no intention of drawing the farmers away from such private interests as found profit in lending to them.

In the long farm crisis after the first World War, the federal land banks followed a strict policy of foreclosure, intended to protect the tax-exempt bondholders at the expense of the farmers. When President Roosevelt came into office in 1933, the farmers, by "penny sales" and other aggressive action, were resisting the loss of their farms. "Our wives and children hold first mortgage on this farm." This principle of human rights above property rights penetrated deeply into the consciousness of the farmers when the wave of foreclosures was sweeping tens of thousands of owners off their land every year.

The first measures under the Roosevelt administration included a moratorium on federal land bank foreclosures; a lowering of interest rates; and provision for special mortgage loans from the Land Bank Commissioner on easier business terms than the federal land banks required. This relief brought warm response from the masses of farmers. Many did not realise that President Roosevelt and his party were encouraged to help the farmers as a means of rescuing financial corporations. These corporations were overloaded with farm mortgages on which nothing could be realised unless their farm debtors received emergency aid from the government.⁵

By 1938, the federal land banks and the Land Bank Commissioner were holding nearly 40% of the total outstanding farm mortgage debt. But with the partial "recovery" of agriculture, it was emphasised that lending should more and more return to the "normal" capitalist sources. In 1939, the share of total mortgage debt held by federal agencies was already slightly smaller than it had been the year before.⁶

Having served as a "yardstick" with moderate interest rates and provision for amortisation of principal, the federal land banks have brought about somewhat more standardised and less exorbitant terms in private mortgage lending. The government has aimed to stabilise the relation between farmers and private lenders in order that this relationship may be preserved.

For credit over a shorter period (from six months to three years) other agencies also were set up by the government. Here again chief emphasis was placed on methods which interpose certain channels between private capital and the farmer. For like the federal land banks, the federal intermediate credit banks obtained their capital from private investors, and these banks did not deal directly with the farmer. He actually obtained his "federal" production credit either through a privately owned bank or through a co-operative in which the farmer himself must carry stock equalling at least 5% of the amount of his loan. As an emergency measure since the first World War, loans have been granted for seed or feed or for drought relief, directly from federal funds to individual farmers. Like other forms of federal credit these have been available only to farmers whose operations were recognised as a going business concern. They have not been available to the very small farmers whom the government regards as a troublesome "surplus" in the agricultural pattern.

Separately organised from the agencies now combined in the Farm Credit Administration, which handles business loans to farmers, is the Farm Security Administration. This agency administers the Bankhead-Jones Farm Tenant Act and other "rehabilitation" loans granted as constructive relief to highly selected poor farmers. Those who receive loans from the F.S.A. must submit to supervision of their affairs by a representative of the government.

In spite of this impressive apparatus, great numbers of working farmers are still tied to the usurer's credit of village merchants (especially in the South) or to production credit from processors, livestock dealers, fertiliser companies, or commission merchants, involving relatively high interest rates and loss of independence. Farmers have not been released from their subjection to non-farm private capital.

Marketing co-operatives were built up by the farmers as an obvious weapon for defending a reasonable price level for their products. The movement was initiated chiefly by members of the National Grange, organised in 1867. To-day many important farmer-controlled co-operatives are affiliated with the Farmers Educational and Co-operative Union, commonly known as the Farmers Union, or with the American Farm Bureau Federation.⁷

Throughout the 19th century, and, except on the Pacific Coast, even up to the World War years, the considerable growth of co-operatives was almost wholly confined to small local associations which could not play an effective rôle. In its report on *Co-operative Marketing*, the Federal Trade Commission concluded that

"While some bargaining strength was gained through these local associations...private dealers and commission men by playing one group against another, and through various practices, understandings, and agreements were still able to reduce margins until the benefits were not all that were

to be desired...the local group is so unimportant that it can have no effect on price or general market conditions."⁸

Not until 1911 were the principles of co-operative organisation clearly defined in legislation. The "model" co-operative law passed that year in Wisconsin was quickly followed by similar laws in many other states.⁹ In 1914, Congress in the Clayton Act exempted largescale co-operatives from the restrictions of the anti-trust laws, and this was further clarified in the Capper-Volstead Act of 1922.

Co-operatives in a capitalist country are a form of business organisation through which the small producers attempt to meet the rest of the capitalist world on an equal footing. Farmers' marketing and purchasing co-operatives did business totalling \$2,100,000,000 in the 1938-39 marketing year, according to the Farm Credit Administration. Of 10,700 active co-operatives, 8,100 were engaged primarily in marketing and 2,600 in the purchasing of farm supplies. Co-operatives have had direct encouragement from the government including credit advantages. The Federal Farm Board, set up under Hoover in 1929, actively promoted the organisation of several large marketing co-operatives. Existing co-operatives also received loans from the board, said to have been, in several cases, exactly equal to the co-operative's outstanding debt to a bank.

In relation to total output, co-operative marketing has been most important in dairy products, livestock and cotton. Some co-operative selling is now carried on in almost every type of farming. But even where co-operatives have been most highly developed and have maintained the outward form of democratic organisation, they have seldom served the smallest commercial producers. Most of the three million members are drawn from the medium-sized farms. They have become increasingly aware that the more powerful the co-operative, as a commercial organisation, the more difficult it is for working farmers to keep it within their own control.

Dairy co-operatives in the milksheds of the great metropolitan areas include in their membership most of the dairy farmers within the area. But they have been directly encouraged and are usually dominated by the large dairy products companies. In New York State, for example, the Dairymen's League Co-operative Association, largest of all milk marketing co-operatives (35,000 members in 1939), is directly under the influence of The Borden Co., with which the League does 45% of its business. Reporting to the Temporary National Economic Committee, the Federal Trade Commission stated in general that: "In several large milk markets the management of co-operative organisations were [sic] obviously under the influence of distributors and did not adequately protect the interests of the farmers."¹⁰ The underlying problem of making the officials of the co-operative represent the interests of the large membership instead of obeying the dictates of two or three private corporations has not been solved.

Such nationally known organisations as California Fruit Growers Exchange and Sun-Maid Raisin Growers of California, with their member co-operatives, are controlled by the "farmers" in San Francisco who are active in banking and railroads, and other big non-farm interests. The corporation farms are also interlocked with the canning companies, to whom some of these co-operatives sell much of their product. Here the medium-sized farmer is crowded out from control of "his" cooperatives by forces of finance capital operating directly within agriculture.¹¹

A similar situation has developed in cotton. The American Cotton Co-operative Association, organised under the leadership of the Federal Farm Board, handled about 15% of the 1934 crop. "The profits are not divided equally or proportionately, even assuming there had been profits. The losses are not made good by the so-called members. . . . It is owned and controlled by its officers." ¹² The affairs of this cotton co-operative were in such a condition that the U.S. Senate Committee on Agriculture and Forestry conducted a prolonged investigation of its marketing practices, which were shown to include false grading of cotton. Management has rested with large plantation owners and others representing trade and banking. Membership has never reached down into the ranks of the smallest growers.

Another co-operative set up by the Federal Farm Board was the Farmers National Grain Corp. whose stock was owned by regional grain co-operatives. This was so organised that management frankly rested in the officials. It seems to have had little effect on the farm price of wheat and its operations did not satisfy its member organisa-

tions. Rescued from bankruptcy by federal aid, it continued to function under a new name, as Farmers Union Grain Terminal Association.

Such difficulties, of course, are not insuperable. Farmers can solve their problems only by organisation. Organised direct resistance to monopoly buyers and processors is an essential part of their struggle. But experience has shown that the usefulness of a co-operative to the medium-sized and smaller producers depends on their active participation. Without a genuinely democratic form of organisation and constant vigilance by the rank and file of the membership, any cooperative may easily be turned against the interests of the working farmers.

Many co-operatives do not confine their activities to obtaining small savings for their members but carry on educational work. They afford one of the few opportunities for a significant part of the farm population to get a general perspective on the farm crisis.

At best, co-operatives cannot be expected to solve all problems of prices and markets. They can be used to cut into the profits of the middlemen. They may even widen the farmers' market by reducing prices to the ultimate consumers, especially when the co-operative itself includes both farmers and workers, and carries the product from the farm to the non-farm consumer. The Consumer-Farmer Milk Co-operative, Inc., started by the Dairy Farmers' Union in New York State and a group of consumers in New York City, offers a good example of such useful action.

But co-operatives cannot touch the problems of mass unemployment. They do not bring into successful business the very small farmers whose special problems are set forth in Chapter VII.* The moment a co-operative really succeeded in affecting the profits of monopoly traders or processors, it would almost certainly be faced with new problems of credit. For the forces of big capital which deliberately push down prices paid to farmers are interlocked with the banks. In their power over private credit and their invisible influence

^{*} Ventures in co-operative farm production for the capitalist market have an extremely precarious existence. They are essentially different from collective farming in a socialist country.

in shaping government policies, they hold powerful weapons against the success of large co-operatives in genuinely protecting the farmers' interests.

A third important development in recent years is the government programme under the Agricultural Adjustment Act and other measures designed to raise prices received by farmers. The New Deal has approached the problem through efforts to bring supply and market demand into rough relation to one another, chiefly through restriction of farm output. Of course the Administration admits the serious need of greater purchasing power in the hands of the non-farm population. The Fair Labour Standards Act has brought fixing of minimum wage rates for much non-farm labour, but these do not assure workers an adequate income. Relief, whether federal or state or local, has been given to the unemployed on a scale that allows only emergency diets and next to nothing for clothing and bedding and other supplies. Direct federal relief has been withdrawn. Appropriations for work relief have been cut. "More bullets and less butter" sums up official policies since the outbreak of the second imperialist world war.

Farmers have welcomed the benefits under the AAA and rightly demand that until their incomes are restored to a decent level federal benefits shall continue. But the AAA programme has brought criticism from many quarters. Under the original act (of 1933) the sums paid to corporation farms and large landowners created a major scandal. They included, for example, \$102,408.35 to Delta & Pine Land Co. under the 1934 cotton program and \$101,039.52 under the 1935 cotton program.¹³ In 1937 (the last year before a \$10,000 maximum benefit was fixed by Congress), 11 concerns received over \$100,000 apiece. The list was headed by the Metropolitan Life Insurance Company with \$257,095 and three other companies (Prudential, Equitable, Travelers) with more than \$200,000 each.14 Even the present \$10,000 maximum has allowed large-scale operations to receive benefits which might better have been distributed among the smallest farms. Now the chief burden of curtailment is carried by the medium-sized producers while many big farmers raise a full crop and benefit directly from the smaller farmers' restriction of output. Under existing laws the government may not regulate the output of any producer. The "benefit" is paid as bait

offered to obtain voluntary compliance. It is not, nor does it pretend to be, related to the farmer's need.

In spite of widespread compliance with the crop restriction programme, prices have failed to cover the farmers' average cost of production. With limited output, farmers' total income has remained far below pre-crisis levels. The medium-sized farmers are not holding their own as business men.

Both workers and farmers resent the underlying idea that production should be limited so long as human need for the product remains unsatisfied. They see that commercial retail prices for foods and for cotton products are much nearer to pre-crisis levels than the prices that farmers receive. They note that the special trade promoted by the Federal Surplus Commodities Corporation is concerned only with "surpluses" already produced and troublesome. This distribution might be developed as a powerful instrument for relating production to the needs of the lowest-paid groups and the unemployed. But as it has functioned it is little more than a gesture.

Problems To Be Solved

Unsolved farm problems touch every aspect of the current farm crisis. Uppermost in the "middle" farmers' desires are two major points. First, they demand prices (and gross income) to cover their average cost of production, including charges for rent, interest, taxes and other business debt. Second, they demand reduction of those charges, through lower rents, lower interest rates, changes in the tax system, and lower prices for farm equipment and supplies. Some would like to see all their capital charges and taxes made legally secondary to a fair family income.

To the small, very poor tenants and the thousands who have been driven off the land, the question of land ownership seems of greatest importance.

Organised activity of the "middle" and small commercial farmers is now concerned primarily with higher prices for their products. More and more they oppose crop restriction. If the government cannot control prices without balancing supply with effective demand, then it should increase consumers' mass purchasing power instead of de-

liberately cutting down production on the land. Many farmers are ready to help the efforts of non-farm workers to raise their standards of living. They begin to see, also, that farmers, as producers, have a lively personal concern in adequate government relief for workers who are not employed.

These "middle" farmers demand, as the Populists demanded half a century ago, that monopoly forces shall be curbed and the high profits drawn from the handling of farm products shall be reduced. They have advanced beyond the Populists in learning that "middle" farmers must be protected not only against outside monopolies but also against the low costs and favored outlets of their large farm competitors. On these points, the New Deal has been extremely weak. Although the Federal Trade Commission had assembled in 1937 fresh evidence of high profits for processors, directly related to their monopoly practices, nothing has yet been done that essentially weakens their monopoly position. Corporation farms in California put over, without federal interference, a form of crop restriction which has been disastrous to their smaller neighbours.

Every form of monopoly pressure affects both farmers and the nonfarm masses. Resistance to monopoly is another vital point in the farmers' struggle and another field for closest co-operation between organised workers and organised farmers. Some beginnings have been made. In the New York milk strike of August, 1939, led by the Dairy Farmers Union, aid offered by trade unions in New York City was a definite factor in the farmers' victory. Each of the three national farm organisations has gone on record for support of organised labour. The National Grange (reporting 800,000 members) and the American Farm Bureau (reporting 400,000 members) are less explicit and less progressive on this point than the Farmers Educational and Co-operative Union (reporting 100,000 members).*

Reactionaries are fully aware of the rising sympathy between working farmers and wage workers, and view it with genuine alarm. The

^{*} Membership figures are not comparable. It is generally understood that the Farm Bureau is larger than the Grange. Ratios indicating comparative strength are said to be: Farm Bureau 5, Grange 4, Farmers Union 2. Since there is considerable state autonomy within each of these organisations, the statements of their national conventions do not always represent correctly the policy followed by state officials. On the Pacific Coast, for example, the Grange has shown itself more liberal than the Farmers Union.

Associated Farmers has been carrying on a determined fascist-like campaign to counter this "dangerous" trend. This organ of big capital and leader in violent repression of strikes and union organisation on the large California farms has spread out from its home state. It now claims over 100,000 members in 15 states.

Organised workers and all progressives are directly challenged to show their understanding of the farmers' problems and vigorously to counter the efforts of the Associated Farmers. For its feverish and expensive campaign is seeking to line up the farmers not merely against any form of organised labour but indirectly against the interests of the working farmers themselves. The Associated Farmers represents those who will fight by any means to defend privilege for the few at the expense of the many. Their methods would further narrow the base of production, with brutal indifference to the needs of unemployed workers and impoverished farmers. These reactionaries fear the power of the working farmers who are coming to see that their only hope lies in such changes as will bring abundance to the masses.

Problems of tenancy, mortgage debt, other credit costs, and taxes likewise have brought working farmers into direct conflict with the capitalist class. For farmers resent it deeply when they see land costs and capital debts eating up part of the income needed for their own living. They are not prepared as yet to challenge the underlying principle of private ownership of land, but the crisis has taught them that the claims of outside owners and mortgage holders should be made secondary to the human needs of those who do productive labour on the land. So various demands have developed, some reminiscent of an earlier period, others carrying into action this new concept of putting human needs ahead of the claims of capital.

The idea that land should be made available for sharecroppers and other poor tenants had taken such deep root that one point in the New Deal programme touched upon this question. But in the first two years after the Bankhead-Jones Farm Tenant Act was passed in 1937, only 17,000 farm purchase loans had been arranged.¹⁵ With threequarters of a million sharecroppers and almost an equal number of other tenants on very small farms, this "gesture" betrays a lack of seriousness in dealing with the problem. Under the law these highly selected few are given an opportunity to *buy* land and start operations with a burden of debt. Interest rates are low, however, and amortisation payments are relatively small.

For the favoured few, the transaction promises some stability. But the appropriation must be a hundred times larger; the poor tenants must be more democratically selected; and the purchasing power of the non-farm population must be considerably increased if such measures are to give—even temporarily—genuine relief to one of the most exploited groups in the United States. It is important, however, that poor farmers themselves should have a stronger voice in the administration of such measures. And if appropriations are increased these must be safeguarded against offering only small "subsistence" farms. The idea of anchoring on the land a mass of semi-destitute "peasants" to provide cheap wage labour for large farms is entirely contrary to the American tradition. Nonetheless, there is a real danger that any expansion of the farm purchase programme may be twisted in this direction.

Both farmers and wage workers are vitally concerned in the way the tax load is distributed. Real estate taxes, which are the mainstay of local government revenue, bear most heavily upon them. Small properties are assessed less favourably than large properties. Real estate and the "personal property" of the working farmers are spread out to view with no possibility of concealment. Tenant farmers and workers who live in rented dwellings carry in their rental payments the taxes paid by their landlords. Sales taxes take a relatively greater slice out of small incomes than out of large. Taxation is a whole broad field, which we cannot explore here. But it is obvious that much remains to be done toward relieving the tax load of those who have no margin and increasing the levies on the wealthy.

Mortgage debt and tenancy are both forms under which farmers pay toll to other individuals or corporations for the use of the land. Private ownership of land has been an integral part of our American economy. Whether as large privately owned tracts, held for renting to tenant farmers, or as private grants to be sold in smaller parcels, or as public land made available to homesteaders, land in the United States has always been regarded as a source of private wealth, subject to a minimum of social interference with the owner's freedom. Stripping of forests and reckless "mining" of the good earth have brought floods, erosion and exhaustion of soil, with tremendous waste of resources and losses in property values in land. "Conservation" as a social necessity has become a recognised part of public policy. This is applied, of course, in the limited and piecemeal fashion characteristic of all social efforts in an economy concerned primarily with property rights. Still, the principle is now accepted that after private owners have wrecked parts of the earth's surface on which our human life depends, then the government must step in and try to restore this social heritage. From this a new concept of public responsibility for the use of natural resources has begun to seep into our consciousness.

It is easier to recognise the damage that has been done to the land by private ownership than to see how private ownership of land has intensified some of the problems oppressing those who live and work on the land. Only for poor tenant farmers has this become clear. On tenant farms, which represent one-third of the total value of farm land and buildings in the United States, the title to the property has become entirely divorced from the use of the farm as a productive unit. Prosperous tenants regard their rent simply as one among many business costs, but for the masses of small, poor tenants the rent is clearly and simply a toll drawn by the land owner from the value produced by the farmer's labour.

For the cwner-farmer this distinction between the usefulness of his farm and the property value of his title is still commonly blurred. Assuming that the owner-farmer has settled in to make a living from his farm, his chief desire is security of possession. Ownership of the land has been the surest way to obtain this security. If the farmer has borrowed on mortgage, his security of possession is by so much impaired. The farmer's concern with his farm is then divided between its usefulness to him and the property claim against his title which his mortgage debt gives to an outsider. If the debt becomes too heavy in relation to income, the farmer loses his land. The property claim to the land becomes entirely divorced from its use by the working producer.

Earlier chapters have shown how this process has gone forward as an integral part of American capitalist development. Private individual ownership of land, which in the vast new country gave farmers an independence unknown in the older countries, has developed into an instrument for bringing them into subjection to outside capitalists. For sharecroppers who suffer from special landlord exploitation and for other poor tenants, whose scale of operation is so small that the payment of any rent leaves the family in dire poverty, a struggle for independent private ownership with generous government aid is necessary at the present stage. But no extension of independent private ownership can bring a permanent solution.

When farmers were resisting foreclosures in the early 1930's, and saying that "Our wives and children hold a first mortgage on the farm," they were taking a first step in the struggle that looks toward a longer future. They were asserting that the right of the working farmer to operate a farm and keep the fruits of his labour must take precedence over any property claim on the land. This is a sound principle which will survive in the future transition from a capitalist to a socialist America.

Although the banks and insurance companies, state governments and the New Deal were compelled to yield temporarily on the owner's right of foreclosure, they did not for one moment grant the justice of the farmers' resistance. But the economic crisis of the early 1930's was so severe and the farmers were so aroused that pressing of creditors' property rights against them would have created a political crisis.

State moratorium laws are now expiring and federal land banks are trying to restore their earlier business standards of foreclosing against a delinquent debtor. Farmers may well take up in earnest the demand for legal recognition that human rights to a decent living come ahead of any claims by landlords and creditors. Such protection is as important for the farmers as fair minimum wages on the job and adequate relief to the unemployed are to the working class.

Mortgages, tenancy, insecurity on the land; poorly equipped farms in competition with efficiently mechanised farms; low prices and restricted markets; domination by traders and processors, by corporation lenders and landlords; and special problems of destitute small farmers all combine to give the farm crisis its peculiarly complex character. These separate phases of the crisis challenge farmers to their separate forms of struggle, which the three national organisations of farmers have taken up with varying degrees of understanding and

vigour. As the struggle develops, those involved in its different immediate objectives will realise more and more clearly that they are wrestling with the forces underlying and dominating American capitalist economy. The political implications of these economic struggles will become inescapable.

Reactionaries are even now busily appealing to farmers as fellow property owners and business men. These spokesmen for finance capital know well enough that farmers are losing their property. They know that under capitalist policies the numbers of poor farmers will increase while a steadily declining number supply the food and cotton to satisfy a dwindling market in the non-farm population. But they appeal to the farmers' tradition as independent business men, diverting them with a pleasing picture, too rosy for the past and grossly unreal in relation to the present. For the financial lords and their associates and politicians who still profit from capitalism, even in its last stages of decay, 'have a haunting and well-justified fear that the masses of working farmers may join forces with the wage workers in their struggle for security.

Every phase of the farmers' struggle clashes with practices which the capitalists defend as within their rights. For farmers challenge the traders' and processors' right to obtain their product for prices below the average cost of its production. They have challenged the creditors' right to throw the working farmer off his farm. They oppose the hideous absurdity of limiting production when hungry people need more products from the land.

Farmers who can still make even a very poor living on the land have been less ready than wage workers to carry these questionings of the existing order to their logical conclusion. Farmers have in general maintained the form of independence; they expect to sell not their labour power but the products of their labour. Working farmers are survivors of an earlier period. They have been long exploited and are now brought to the edge of destitution without the wage workers' obvious and complete separation from all means of production. But the uncertainty of capitalist markets, insecurity on the land, and the lack of opportunity in other occupations have raised basic questions.

Many are ready to accept some government control. They have tried a sort of "planned" production. But the New Deal has nothing in common with the socialist planning which would be democratically conceived and carried out by wage workers and working farmers to provide maximum abundance for all. Meanwhile one inescapable conclusion is gaining rapid headway. Immediate relief for the farmers from their intolerable situation requires a sharp writing-off of farmers' debts; stringent regulation of the food monopolies; and a revival of full productive activity in industry as well as agriculture for the primary purpose of assuring abundance of food, clothing and shelter to the entire population.

These immediate goals cannot be lightly achieved, for they challenge certain cardinal principles in our capitalist system. But farmers have never been afraid of struggle for purposes that clearly affect their interest. The outcome of this present struggle vitally concerns also the entire working-class. A great responsibility rests upon the organised wage workers to stand shoulder to shoulder with the working farmers and to prove the strength of their common interests. Only through an unshakable alliance between wage workers and working farmers can the great productive forces of this country be released from the dead hand of finance capital. Only thus can the government be made an instrument of the people. Only thus can it be compelled to place the human needs of those whom capitalism has driven to destitution above the demands and the intrigues of those who profit from exploitation.

APPENDICES

CHIEF DOCUMENTARY SOURCES

REFERENCE NOTES

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A P P E N D I X A

Trends in Farm Income (Gross)

	TOTAL FARM (<i>milli</i>	A INCOME	AVERAGE IN PER FA	NCOME RM	INCOME PE	ER FARM R DOLLARS
	Unrevised	Revised	Unrevised	Revised	Unrevised	Revised
1010	6,643		1,044		1,065	
1919	16,935		2,626		1,300	
1920	13,566		2,104		1,047	
1921	8,927		1,381		909	
1922	9,944		1,539		1,033	
1923	11,041		1,725		1,135	
1024	11,337		1,780		1,171	
1925	11,968	12,800	1,878	2,009	1,196	1,280
1026	11,480	12,378	1,813	1,952	1,170	1,259
1027	11,616	12,437	1,851	1,981	1,210	1,295
1028	11,741	12,816	1,870	2,041	1,206	1,317
1929 °	11,941	12,791	1,900	2,035	1,242	1,330
1030	9,454	10,337	1,503	1,644	1,037	1,134
1021	6,968	7,397	1,087	1.154	877	931
1022	5,337	5,562	810	844	757	789
1022	6.406	6,404	944	944	866	866
1933		7.629		1,121		911
1934		8,688		1,275		1,020
1935		9,672		1,422		1,147
1930		10.425		1,531		1,178
1938 0		9,290(prel.) (1,356(prel.) ——	1,111(prel.

^o Gross farm income reported for 1929 by 1930 Census of Agriculture (vol. IV, p. 913) was \$11,011.3 million, not including 288,766 unclassified farms. Including the writer's estimate for unclassified farms, the total would have been \$11,234.2 million, or \$1,787 per farm.

^b Includes government payments as follows:

	1933	\$131 million	1935 1936	\$573 million 287 million	1937 1938	\$367 million 482 million	
~	1934	44/ 1111101	-))			1 1	-

These payments exclude livestock purchases which are included in basic estimate of farm income.

These figures are gross income, including products used by the farm family from its own farm, without any deduction for rent, interest, wages, taxes, or other operating expenses.

The unrevised figures of total income are taken from Agricultural Statistics, 1938, p. 434. The revised figures of total income are from Agricultural Statistics, 1939, p. 482.

Average income per farm is derived from total income, and number of farms as given by the census for 1910, 1920 (and same figure for 1919, since census was taken as of January 1, 1920), 1925, 1930, and 1935. For intercensal years the number of farms is estimated by distributing the total intercensal change according to the trends in farm population as given in *Agricultural Statistics*, 1939, p. 484.

Pre-war dollars are based on correction by index of prices paid by farmers, with 1910-1914 as 100. See Agricultural Statistics, 1939, p. 496.

A P P E N D I X B

National Income and Farm Income, 1929

Total national income from production of goods and services in 1929 was estimated as approximately \$81 billion. (See U. S. Bureau of Foreign and Domestic Commerce, *Income in the United States*, 1929-37, p. 17, and Brookings Institution, *America's Capacity to Consume*, p. 165.)

Income produced by agriculture includes food and fuel raised and used by the family on the same farm. This was estimated at \$1,777 million in 1929. (Crops and Markets, vol. 8, p. 397.) Deducted from the gross income produced by agriculture are the sums estimated by the Department of Agriculture for "current expenditures for production," \$1,958 million, and "depreciation of buildings and equipment," \$912 million. (Agricultural Statistics, 1937, p. 384.) This latter item supposedly includes replacement expenditures but no investment of income to increase the value of the farm plant. We have not included wages paid to farm workers in the expenditures deducted. Farm wage workers are a part of the agricultural population and should be included in this comparison of agriculture as a whole with the rest of the total economy.

In the Department of Commerce estimates of national income, the rent paid by farmers is not classified as part of the income produced by agriculture and interest they pay to non-farm creditors is not shown separately from total interest paid by farmers. But in the Brookings estimates such payments are shown separately as income drawn from agriculture by the

non-farm population. We have followed this procedure. In 1929, these items amounted to about \$238 million for interest and about \$953 million for rent. (*America's Capacity to Consume*, p. 196, footnote.)

Both the Department of Commerce and Brookings accept as basic the Department of Agriculture estimate of gross farm income for 1929, although it is considerably higher than the 1929 figures shown by the Census of Agriculture of 1930, based on data given by the farmers themselves. We use instead the census total, \$11,011 million, with an estimate added for the 4.6% of all farms which made no report on their value of products. Giving weight to the other data reported for these farms, we raise the total to \$11,234 million, and substitute this for the \$11,941 million of the official estimate.

Of course all data on national income and income produced by agriculture include much rough estimating, but the following figures provide the basis for percentages given in the text.

INCOME PRODUCED IN 1929

	Millions
Total national income Bureau of Foreign and Domestic Commerce estimate	\$81,128
Brookings (America's Capacity to Consume, p. 105)	00,002
Total produced by agriculture, net "	
on basis of Department of Agriculture gross estimate"	9,071 "
on basis of Census of Agriculture total, with estimate added	0 - (- 4
for 4.6% of farms not reporting gross income	8,304
Income retained by farmers and farm workers after rent and in-	
terest to non-farm landlords and mortgagees	0.0
on Department of Agriculture basis	7,880
on Census of Agriculture basis	7,173

^e After deducting depreciation and current expenditures of production, but without deducting wages, interest, rent or taxes.

^b Estimate before revision published in *Agricultural Statistics*, 1939. (See Appendix A.) Increase in estimate of agricultural income would presumably raise by an equivalent amount the estimate of total national income and would not materially affect the percentage produced by agriculture.

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WHY FARMERS ARE POOR

APPENDIX C

Cotton and Southern Agriculture as a Whole

Cotton acreage in 1929 was about 78% above the cotton acreage of 1899, although the total acreage in southern farms had declined, except in Oklahoma. In the earlier year, about 44% of this cotton acreage was in the West South Central states; in the latter year, 60% of the much larger total.

Α	CRES OF CO (in t	OTTON HAR Chousands)	VESTED		
South Atlantic	1934	1929	1919	1909	1899
East South Central	4,557	7,232	8,883	9,003	6,842
	5,440	8,637	6,390	7,926	6,726
West South Central	15,991	26,353	18,153	15,017	10,661
Mountain and Pacific "	440	648	204	I	
Other *	325	357	110	97	46
United States	26,753	43,227	33,740	32,044	24,275

^b Missouri, Kansas and Illinois.

This increase in cotton went along with increased specialisation on the individual farms. In 1899, the census reported 1,418,584 farms raising cotton and classified 76% of these as cotton farms because 40% or more of their gross income was derived from cotton. Thirty years later, cotton was raised by 1,986,726 farms of which 84% were classified as cotton farms. Total cotton acreage had increased by 78%; total number of farms raising some cotton had increased by 40%; specialised cotton farms had increased from 1,071,545 to 1,640,025 while the number of farms on which cotton was a secondary product remained practically unchanged.

Except in the South Atlantic states the specialised cotton farms produced a larger percentage of the total southern farm product in 1929 than in 1899.

PRODUCT OF SPECIALISED COTTON FARMS AS PER CENT OF ALL FARM PRODUCTS -SOUTHERN STATES ONLY

South Atlantic and	1929	1899
Fast South Card 1	30	34
West South Central states	49	37
West South Central states	57	47
The South	46	
	70	39

In 1929, the total value of the United States cotton crop was estimated at 1,458 million. Of this total, 95% was produced in the southern states and accounted for 38% of the total southern farm production. These figures include a small amount of cotton raised on farms not classified as cotton farms, but at the same time they are smaller than the total output of the specialised cotton farms. For these specialised farms usually produce small quantities of other products: food used by the farm family; livestock and livestock products sold or traded; and forest products. These other items reported by the census as products of cotton farms in the South totaled 381 million and are included in the "gross value produced" by cotton farms shown in the following table.

SOUTHERN FARMS, 1929-1930

type of farm ^e Cotton	sharecroppers 566,374	other farms 1,051,397	produced° (<i>millions</i>) \$1,628.3 ^ª
Fruit, truck and crop-		<i>.</i>	
specialty °	87,927	275,763	552.3
Cash-grain	6,706	53,710	169.3
Stock ranch and animal-			
specialty	2,211	75,386	288.6
Dairy and poultry	2,473	79,196	223.2
General	19,241	329,953	381.8
Self-sufficing	25,720	315,479	145.0
Abnormal Unclassified	65,626	266,654	$\begin{cases} 138.3 \\ 77.9 \text{ (est.)} \end{cases}$
Total	776,278	2,447,538	3,604.7 °

• Farms are classified by type according to their principal product. If no one product brings in at least 40% of gross farm income, or if two products are equally important, the farm is a "general" farm (provided it sells at least 51% of its product) or a "selfsufficing" farm (provided it sells less than 51% of its product). The "abnormal" farms are chiefly "part-time" farms, according to a special definition which excludes many farm operators who also work away from the farm at some time during the year. (See discussion in Chapter IV.)

^b Includes tobacco, sugar-cane and other special crops.

"Not identical with total sold or traded. Gross value includes food and fuel produced on the farm and used by the farm family, which amounted to about 18% of the gross total in southern agriculture as a whole.

⁴Not identical with value of cotton crop in the southern states, reported as \$1,382,-805,883.

WHY FARMERS ARE POOR

APPENDIX D

Estimated Gross Income Distribution, 1929, of "Unclassified" Farms

		NORTH	v	VEST
TT 1 Ar	FARMS	GROSS INCOME	FARMS	GROSS INCOME
Under \$600	23,620	\$7,086,000	7,430	\$2,229,000
\$600-\$999	22,000	15,400,000	4,335	3,034,500
\$1,000-\$2,499	37,330	54,128,500	10,000	14,500,000
\$2,500-\$5,999	8,950	26,850,000	3,330	9,990,000
\$6,000-\$9,999	1,290	8,385,000	510	3,315,000
Total	93,190	111,849,500	25,605	33,068,500
	S O	UTH	UNITE	DSTATES
	FARMS	GROSS INCOME	FARMS	GROSS INCOME
Under \$600	125,000	\$33,750,000	156,050	\$43,065,000
\$600-\$999	25,000	17,500,000	51,335	35,934,500
\$1,000-\$2,499	18,471	22,165,000	65,801	90,793,500
\$2,500-\$5,999	1,500	4,500,000	13,780	41,340,000
\$0,000-\$9,999			1,800	11,700,000
Total	169,971	77,915,000	288,766	222,833,000

(Source for total number of unclassified farms in each geographical division, and for data on their acreage and value, *Census of Agriculture*, 1930, vol. III, pp. 12 and 18.)

APPENDICES

A P P E N D I X E

Distribution of Farm Products by Farm Gross Income Classes: 1899 and 1929 *

	TOTAL				
	PRODUCTION	CLASS A	CLASS B	CLASS C	CLASS D
	(millions)	%	%	%	%
North (four div	visions)	, -	, 0	,0	70
1899	2,285.8	18.7	40.3	37.2	3.7
1929	5,919.1 °	24.7	38.7	33.9	2.8
South (three div	visions)		5.	557	
1899	1,167.5	13.2	18.3	55.4	13.2
1929	3,604.7 °	14.5	16.6	55.5	13.4
West (two divis	sions)				51
1899	288.7	56.2	23.3	17.8	2.6
1929	1,710.3 °	57.0	23.3	17.5	2.I
United States					
1899	3,742.1	19.9	32.1	41.4	6.6
1929	11,234.2 °	26.4	29.3	38.2	б.1

^a Distribution is given by census for 1899 and is estimated by the author for 1929. (See reference note 20 from Chapter III.) Gross income classes used in this table are the following:

1899	1929
Under \$250	Under \$600
\$250-\$999	\$600-\$2,499
\$1,000-\$2,499	\$2,500-\$5,999
\$2,500 and over	\$6,000 and over
	1899 Under \$250 \$250—\$999 \$1,000—\$2,499 \$2,500 and over

^b Includes estimate of production by "unclassified" farms. See Appendix D.

A P P E N D I X F

Relative Importance of Wages and Other Capital, by Type of Farm

Differences among the several types of farms in the relative importance of wage labour and farm equipment as of 1930 are roughly indicated by the following tables. The first is based on a sample study of 1,116 large-scale farms. "Capital" in this table includes the "value" of land, and the report gives no separate data on the various parts of which the totals are composed.

WHY FARMERS ARE POOR

		PERSONS EM-			
		PLOYED PER	CAPITAL, INCLUDING LAND		
	ACREAGE	I,000 ACRES	PER WORKER	PER 1,000 ACRES	
Truck	1,710	51.6	\$2,758	\$142,250	
Fruit	2,240	36.1	3,631	131,150	
Poultry	1,020	20.4	11,387	232,201	
Crop-specialty	5,728	17.1	4,017	68,660	
Cotton	4,170	15.6	4,676	72,994	
Dairy	2,127	9.7	12,026	116,470	
General	9,645	6.2	6,713	41,341	
Animal-specialty	4,748	5.4	16,390	88,372	
Cash-grain	6,646	2.5	20,151	49,727	
Stock ranches	57,851	0.4	24,653	9,631	

AVERAGES FOR 1,116 LARGE-SCALE FARMS, AS OF 1930 *

⁶ Derived from Bureau of Agricultural Economics, Large-Scale Farming in the United States, April, 1938, mimeographed.

Types of farming are listed in the order of their volume of labour per 1,000 acres. And it is noteworthy that the lower the number of workers per acre, the higher is the capital per worker. This sequence is apparently interrupted by the higher capital per worker on all livestock farms, but for truck, fruit, crop-specialty, cotton, general, and cash-grain the trend is clear. It is equally clear if we look at poultry, dairy, animal-specialty and stock ranches, apart from crop farms.

The second table gives average capital per farm and per acre for all farms of each type. It is based on the census of 1930 and shows four items: farm buildings other than dwellings; implements and machinery; feed and fertiliser; and wages. Unfortunately, livestock values given in the census cannot be related to type of farm.

APPENDICES

AVERAGE INVESTMENT PER FARM AND PER ACRE, BY TYPE OF FARMING: 1929-30

TYPE OF	BUILDINGS	IMPLEMEN	TS		AVERAGE
FARMING	NOT	AND	FEED AND		GROSS
	DWELLINGS	MACHINER	Y FERTILISER	WAGES	INCOME
	A	VERAGE 1	INVESTMENT	PER FAR	м
Fruit	\$1,216	\$829	\$298	\$796	\$3,354
Stock ranch	1,363	1,025	549	717	7,175
Truck	908	669	361	635	2,881
Cash-grain	1,472	1,374	71	245	2,943
Dairy	2,020	952	481	239	2,765
Animal-special	ty 2,112	1,071	390	225	3,634
Crop-specialty	734	434	175	197	1,934
Abnormal	888ª	286		125	1,073
Unclassified	708	232	5 114	125	. 772°
Poultry	1,157	425	723	95	1,989
General	1,056	542	130	82	1,480
Cotton	189	170	85	бі	1,035
Self-sufficing	301	125	41	8	425
	A V	ERAGE I	NVESTMENT	PER ACR	E
Fruit	\$17.14	\$11.68	\$4.19	\$11.21	\$47.26
Stock ranch	0.47	0.35	0.19	0.25	2.46
Truck	15.08	11.11	5.99	10.55	47.82
Cash-grain	4.19	3.91	0.20	0.70	8.37
Dairy	14.59	6.85	3.47	1.73	19.96
Animal-specialt	y 9.19	4.66	1.69	0.98	15.82
Crop-specialty	6.71	3.96	1.59	1.80	17.68
Abnormal	12.37	3.98]	5	14.95
Unclassified	7.12	2.33	} ^{1.37}	1.49 {	7.76
Poultry	18.55	6.81	11.59	1.52	31.90
General	7.65	3.92	0.94	0.60	10.71
Cotton	2.61	2.35	1.18	0.84	14.33

1.80

0.59

0.12

6.11

"Part-time, \$455; other abnormal, \$4,166.

^b Estimated.

Self-sufficing 4.33

WHY FARMERS ARE POOR

APPENDIX G

Farm Mortgages, Percentage Distribution of Holdings of Principal Lending Agencies: 1928 and 1939.

	UNITED	NEW	MIDDLE	EAST NORTH	WEST NORTH
1028	STATES	ENGLAND	ATLANTIC	CENTRAL	CENTRAL
Total, millions	\$9,468.5	\$122.5	\$376.6	\$1,950.1	\$4,056.2
per cent	100.0	100.0	100.0	100.0	100.0
Federal agencies ^a	19.1	16.6	17.7	15.9	12.4
Life insurance cos.	22.9	đ	0.1	19.4	32.3
Banks (inc. mut. savings)	10.8	37.7	10.5	I 4.0	6.2
Mortgage companies	10.4		0.5	5.8	15.1
Farmers ^b	14.2	11.8	29.1	19.3	14.9
Other individuals	15.4	24.8	34.8	17.2	13.3
Other agencies	7.2	9.1	7.3	8.4	5.8
1939					
Total, millions	\$7,070.9	\$186.6	\$400.7	\$1,409.0	\$2,290.9
per cent	100.0	100.0	100.0	100.0	100.0
Federal agencies ^a	39.7	22.8	24.4	40.8	42.2
Life insurance cos.	12.6	đ	0.3	13.8	19.2
Insured commercial banks °	7.3	7.3	II.0	8.3	4.4
All other sources	40.4	69.9	64.3	37.1	34.2
	SOUTH	EAST SOUTH	WEST SOUTH		
1028	ATLANTIC	CENTRAL	CENTRAL	MOUNTAIN	PACIFIC
Total, millions	\$491.9	\$281.5	\$001.2	\$106.5	\$601.0
per cent	100.0	100.0	100.0	#490-J	¥091.9
Federal agencies "	28.T	41.8	25.0	26 5	176
Life insurance cos.	12.5	28.0	25.0	56	7.0
Banks (incl. mut. savings)	10.7	11.I	,;; 	16.7	28 T
Mortgage companies	1.5	2.8	I.4.9	14.0	5.2
Farmers ^b	6.4	6.5	5.4	10.0	12.2
Other individuals	23.8	7.4	7.6	10.3	15.2
Other agencies	7.0	2.4	8.0	- J.J 7.0	13.0
1939		'		,	- 3.9
Total, millions	\$397.0	\$340.4	\$831.8	\$445.0	\$768.6
per cent	100.0	100.0	100.0	100.0	100.0
Federal agencies ^a	47.7	49.9	45.5	37.4	20.0
Life insurance cos.	7.4	13.1	15.0	3.6	4.7
			-	<u> </u>	7.7

^a Federal land banks, joint stock land banks, and, in 1939, Land Bank Commissioner loans. Both active and retired. Not comparable with 1928 bank figure. Less than 0.05 per cent.

13.0

24.0

3.0

36.4

2.3

56.7

13.3

31.6

Insured commercial banks

All other

4.7

14.6

51.7

Source: For 1928, The Farm Debt Problem, 73rd Congress, I, House Doc. no. 9, p. 11. For 1939, Agricultural Finance Review, November, 1939.
APPENDICES

A P P E N D I X H

Part-Time Farmers

This appendix shows distribution by region and gross farm income of farmers working off their farms. The \$750 dividing line is used by the census only for part-time farmers working 150 days or more. In using this dividing line for "all farmers" we have assumed an even income distribution within the census group \$600 to \$999. We have also included among "all farmers" our estimated income distribution of the 288,766 "unclassified" farms on which the census gives considerable data but does not give gross income. The combined estimate for the country as a whole is given in the text, p. 113.

FARMERS REPORTING WORK OFF THEIR FARMS: 1929

REGION AND INCOME	ALL FARMERS	FARMERS WORKING	OFF THEIR FARMS
		150 days or more	Under 150 days
THE NORTH (4 division	(s)		
Under \$750	584,853	153,853 *	357,000
\$750 to \$999	231,439	50,000	140,000
\$1,000 and over	1,745,493	17,453	1,097
Total	2,561,785 *	221,306 *	498,097 *
THE WEST (2 divisions)		
Under \$750	138,099	41,444 *	83,700
\$750 to \$999	40,771	15,900	18,300
\$1,000 and over	324,177	14,944	3,158
Total	503,047 *	72,288 *	105,158 *
THE SOUTH (3 division	(2		
Under \$750	1,601,147	143,910 *	645,544
\$750 to \$999	538,427	51,600	113,500
\$1,000 and over	1,084,242	51,085	410
Total	3,223,816 *	246,595 *	759,454 *

* Census figure, from Census of Agriculture, 1930, vol. IV, p. 432.

						ł	ł	P	Ρ	E	E	N	D	1	:]	X]	I								
HT1108 W	CENTRAL		\$49,053	7.572		5,130	3.065		2,999	1,356	3,542			60,323	10,221		8,627		5,726		5,649	3,370	6,316	d "unmort-		
HT1102 H	CENTRAL		\$22,856	2,098		2,705	2,145	2	1,367	813	1,684	-		27,046	3,911	I	5,205		4,081		2,792	2,058	3,484	rtgaged" and	2	
BUTH	ATLANTIC		\$23,909	2,563	ł	3,637	2,624	-	1,856	1,293	2,434	-		27,776	4,142		6,336		4,888		3,898	2,639	4,488	between "mo		
а 1 1	PACIFIC		\$47,462	19,753		9,686	7,465		10,662		11,099			74,534	30,630		15,912		12,863		24,406		19,941	distribution 1		
	MOUNTAIN		\$34,593	11,365		6,833	3,399		5,717		6,531			56,635	19,436		12,519		7,648		15,450	1	12,958	lly estimated		
W, NORTH	CENTRAL		\$20,739	10,705		7,856	5,784	•	7:757	ł	7,954			41,380	26,044		20,333		17,182		25,272		22,307	nclude officia		
E. NORTH	CENTRAL		\$21,794	7,468		5,600	4,501		7,270		6,087			31,070	16,807		10,786		9,837		19,607		13,771	i in 1935 ii	etative	ordius.
MIDDLE	ATLANTIC		\$36,093	6,864		5,365	4,322	1	5,321		5,385			26,028	8,103		6,275		5,721		8,594]	7,061	full owners	an mortance	IS IIIVITEASU
NEW	ENGLAND		\$32,179	6,473		2,667	4,897		4,788		5,696			23,974	7,966		5,483		4,876		5,978	[5,860	s given for	not reportio	mon 10horm
		1935	Managers	Part owners	Full owners ^a	Mortgaged	Unmortgaged	Tenants, not	croppers	Sharecroppers	All tenures		1920	Managers	part owners	^q ull owners	Mortgaged	Unmortgaged	or not rep. ⁴	l'enants, not	croppers	harecroppers	All tenures	^a The average	ared" of farme	agen ut tairing

Average Farm Values by Tenure:

AVERAGE VALUE, LAND AND BUILDINGS, 1935, 1920

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WHY FARMERS ARE POOR

^b Includes 1,844,470 farms reported as free from mortgage, 304,804 farms not reporting mortgage status and 24,187 mortgaged farms not reporting size of mortgage debt. Average Farm Values by Tenure:

AVERAGE VALUE, IMPLEMENTS AND MACHINERY: 1930, 1920^a

			EAST	WEST				EAST	WEST
	NEW	MIDDLE	NORTH	NORTH			HLUOS	HLUOS	HITUOS
	ENGLAND	ATLANTIC	CENTRAL	CENTRAL	MOUNTAIN	PACIFIC	ATLANTIC	CENTRAL	CENTRAL
1930									
Managers	\$1,794	\$2,211	\$1,488	\$1,365	\$1,951	\$1,908	\$1,249	\$1,455	\$1,649
Part owners	1,255	1,484	264	1,394	1,450	1,663	244	216	104
Full owners	682	921	576	828	660	674	264	226	399
Cash tenants	570	880	646	912	609	642	124	114	233
Sharecroppers							63	51	94
Other tenants	741	1,154	727	954	878	1,261	138	109	267
1920						,		(
Managers	1,407	1,675	1,204	1,324	2,036	2,278	I,III	1,118	2,139
Part owners	868	1,032	843	1,328	1,105	1,606	232	195	536
Full owners	555	786	654	983	675	798	326	237	397
Cash tenants	429	732	279	1,135	653	777	176	131	247
Sharecroppers							90	52	93
Other tenants	697	1,013	827	700,1	842	1,438	186	120	247

Not available for 1935.

Sources: On land and buildings, U. S. Census of Agriculture, 1935, Vol. III, pp. 110-111; and Farm Mortgage Indebtedness in the United States, Cooperative Survey by Bureau of the Census and Bureau of Agricultural Economics (U. S.-48, 1937), p. 12. Averages for 1920 were partly taken from U. S. Census of Agriculture, 1930, Vol. IV, p. 252; partly computed from same volume, pp. 162 and 224; and partly computed from Fourteenth Census, 1920, Vol. V (Agriculture), pp. 133, 153, 487, 489,

On implements and machinery, Census of Agriculture, 1930, Vol. IV, p. 252; and computations from same volume, pp. 162 and 225.

APPENDICES

WHY FARMERS ARE POOR

A.P.P.E.N.D.I.X.J

Distribution of Farms and Farm Property, by Tenure

	Unite	d States	Unite	d States
	1	935	1	930
		LAND		LAND
	FARMS	& BUILDINGS	FARMS	& BUILDINGS
Manager	0.7	4.8	0.9	4.7
Part owners	10.1	16.8	10.4	17.0
Full owners				
Mortgaged	18.6	22.3	19.6	22.9
Unmortgaged	28.5	22.8	26.7	21.2
Tenants (not croppers)	31.5	30.9	30.0	31.3
Sharecroppers	10.5	2.4	12.3	2.9
	<u> </u>			·
All tenures	I 00.0	100.0	100.0	100.0
Totals	6,812,350	\$32,859 mill.	6,288,648	\$47,880 mill.

	North	and West	S	outh
		LAND		LAND
	FARMS	& BUILDINGS	FARMS	& BUILDINGS
1935				
Managers	I.0	4.4	0.5	5.8
Part owners	13.4	18.8	6.9	11.3
Full owners				
Mortgaged	24.8	23.6	12.6	19.0
Unmortgaged	30.3	21.3	26.6	26.8
Tenants (not croppers)	30.5	32.0	32.6	28.0
Sharecroppers			20.0	0.2
All tenures	100.0	100.0	100.0	100.0
Totals, 1935	3,390,427	\$24,122 mill.	3,421,923	\$8,737 mill.
1930				
Managers	1.3	4.3	0.5	5.7
Part owners	14.1	19.1	7.0	II.0
Full owners				
Mortgaged	27.0	24.3	12.5	18.8
Unmortgaged	29.1	19.8	24.4	25.2
Tenants (not croppers)	28.5	32.5	31.5	27.0
Sharecroppers			24.1	11.3
All tenures	100.0	100.0	100,0	100.0
Totals, 1930	3,064,832	\$35,536 mill.	3.223.816	\$12.244 mill.

APPENDICES

	North (Ce	and West ontinued)	S (Co1	outh ntinued)
	FARMS	LAND & BUILDINGS	FARMS	LAND & BUILDINGS
1920				
Managers	1.5	3.9	0.6	4.4
Part owners	11.3	15.5	6.0	8.1
Full owners	5			
Mortgaged	26.2	22.3	10.7	15.6
No mortgage or n.r.	34.3	23.1	33.1	33.7
Tenants (not croppers)	26.6	35.2	32.1	28.5
Sharecroppers			17.5	9.7
**				
All tenures	100.0	I 00.0	100.0	100.0
Totals, 1920	3,241,679	\$51,159 mill.	3,206,664	\$15,157 mill.

FULL-OWNER FARM OPERATORS AS PERCENTAGE OF TOTAL, BY REGIONS, 1900 TO 1935

	1900	1910	1920	1930	1935
NORTH AND WEST	%	%	%	%	%
Number of farmers	63.0	62.1	60.5	56.2	55.2
Land "value" Buildings	52.3 64.2	40.5 60.9	42.9 57 . 7	39.4 (56.4)	44 . 9 °
Implements and machinery	60.4	57.9	53.6	47.7	a
Livestock	50.3	55.0	51.0		
SOUTH				<i>.</i>	
Number of farmers	47.2	42.9	43.8	36.9	39.2
Land "value"	53.0	49.8	47.2	40.5	45.8 0
Buildings	63.6	61.9	58.6	55.I)	
Implements and machinery	56. 7	57.8	57.6	49.2	
Livestock	51.3	53.4	52.5	đ	•

"Not available.

^b Corresponding percentage for 1930: North and West, 44.1; South, 44.1.

APPENDIX K

Wage Labour on Large-Scale Farms

A special census study of 7,875 selected large-scale farms, including nearly one-third of all in the gross income group ranging upward from \$20,000, gives us the relation of total wages to gross income for each type of farm among those large-scale operations.

WHY FARMERS ARE POOR

WAGES AS PERCENTAGE OF GROSS VALUE OF PRODUCT ON 7,875 LARGE-SCALE FARMS: 1929

PER CENT		PER CENT
32.4	Cash-grain farms	15.2
31.9	Poultry farms	14.1
30.5	Stock ranches	12.1
28.3	Animal-specialty farms	7.I
27.0	1	,
23.6	All other	21.2
	PER CENT 32.4 31.9 30.5 28.3 27.0 23.6	PER CENT32.4Cash-grain farms31.9Poultry farms30.5Stock ranches28.3Animal-specialty farms27.023.6All other

SOURCE: Computed from Table 6 in special report on Large-Scale Farming in the United States, 1929, based on census schedules and published jointly by U. S. Bureau of the Census and U. S. Bureau of Agricultural Economics, Government Printing Office, 1933.

By applying these percentages to the estimated gross output of all farms of each type with more than \$20,000 gross income in 1929, we arrive at rough totals of wage expenditure on large-scale farms.

ESTIMATED DISTRIBUTION OF WAGE PAYMENTS BY SIZE OF FARM: 1929

LARGE-SCAL	E
(\$20,000 and	over ALL OTHER EMPLOYING
of gross inco	me) FARMS

		WAGE		WAGE
TYPE OF FARM	FARMS	PAYMENTS	FARMS	PAYMENTS
Fruit	2,793	\$34,872,000	103,981	\$77,650,576
Abnormal and unclassified	2,889	35,851,700	138,003	48.445.684
Stock ranches	4,912	30,531,400	38,887	20.347.010
Dairy	2,198	20,615,200	360.151	123.014.515
Truck	1,300	20,606,000	48.270	22.126.284
Crop-specialty	I,929	19,785,900	103.867	64.000 282
Animal-specialty	5,531	19,755,300	206.168	87.025.510
Cotton	903	II.40I.000	162.701	87.080.654
Cash-grain	1,778	9.748.200	205.520	101 726 517
Poultry	506	2.471.800	66 080	12,252,280
General	222	2.144.600	404 650	\$2,057,309
Self-sufficing	-33	2,144,000	494,059	03,907,705
a			97,231	4,090,987
All types	24,981	207,874,100	2,606,620	747,546,213

Comparing these estimated totals on large-scale farms with the wage expenditures reported by the census of 1930 for all employing farms of each type, we arrive at the above distribution of wage expenditures on farms with \$20,000 or more gross income in 1929 and smaller farms which employed some wage labour in that year.

According to this estimate, the large-scale farms, all types combined, paid about 22% of the total wages for farm labour.

CHIEF DOCUMENTARY SOURCES

Our study is based chiefly on census data and other government documents. But available material is not wholly satisfactory. On farm income, for example, we have three different sources. The study of consumer income of farm families in 1935-36 gives estimates based on intensive study of widely scattered counties. This classifies the families according to income groups. It includes family income from outside sources and is supposed to be a net figure, after deduction of expense of operating the farm. It is part of the broad study of *Consumer Incomes in the United States*, published by the National Resources Committee.

Broad total estimates of gross farm income (including food and fuel used by the farm family) and of total cash farm income from sale of farm products are published yearly by the Department of Agriculture. (These gross farm income figures are given in our Appendix A.) Separate estimates of certain costs of farm operation are also published by this department.

The only nation-wide data on gross farm income classified by amount received on each separate farm are given in the Census of Agriculture for 1929 (in the census of 1930) and for 1899 (in the census of 1900). The somewhat abbreviated Census of Agriculture taken in 1935 included nothing whatever on income.

In general, the 1930 census is the richest source of data on farms throughout the country. We return repeatedly to the 1930 census for points on which later material is not at hand. Also the years 1929-1930 are important in themselves, as marking the close of the period preceding the severe economic crisis from which the country has never yet fully recovered.

The chief documentary sources are listed below. Other sources used, both documentary and unofficial, will be found in the Reference Notes which follow.

Department of Commerce Bureau of the Census Census of Agriculture, included in each decennial census, and a less complete Census of Agriculture taken in 1925 and in 1935. Bureau of Foreign and Domestic Commerce Statistical Abstract of the United States, annual. Department of Agriculture Annual Report of the Secretary. Agricultural Statistics, annual since 1936. Yearbook of Agriculture, with statistical section until 1935. Crops and Markets, monthly. Bureau of Agricultural Economics Agricultural Situation, monthly. Also monthly mimeographed bulletins on each principal crop, on livestock, and on dairy situation. Agricultural Finance Review, semi-annual since May, 1938. Agricultural Adjustment Administration, reports on Agricultural Adjustment. Farm Credit Administration, Annual Report. Farm Security Administration, Annual Report. Federal Surplus Commodities Corp., Annual Report. Department of Labor Bureau of Labor Statistics Wholesale Prices, monthly. Retail Prices, monthly. Works Progress Administration Division of Social Research National Research Project on Reemployment Opportunities and Recent Changes in Industrial Techniques: Studies of Changing Techniques and Employment in Agriculture include separate reports on important crops and special phases of mechanisation and employment. Research Monographs and other special reports include volumes on plantation farming, migratory workers, rural youth, rural relief and other economic and social aspects of the farm problem.

Federal Trade Commission

Agricultural Income Inquiry, 1937, three volumes on traders and processors.

Agricultural Implement and Machinery Industry, 1938.

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REFERENCE NOTES

CHAPTER I: Pages 9 to 16.

- 1. Disadvantaged Classes in American Agriculture, Department of Agriculture, Farm Security Administration, Social Research Report VIII, 1938, p. 5. Number of farms includes author's estimate of "unclassified" farms in low-income groups. See Appendix D.
- 2. T. J. Woofter and Ellen Winston, Seven Lean Years, p. 12.
- 3. Changing Aspects of Rural Relief, Works Progress Administration, Research Monograph XIV, 1938, p. 133.
- 4. Woofter and Winston, op. cit., p. 15.
- 5. National Resources Committee, Consumer Incomes in the United States, 1938, pp. 2 and 24.
- 6. Ibid., derived from pp. 25 and 101.
- 7. Facts for Farmers, May, 1938, with reference to summaries released by U. S. Bureau of Home Economics on basis of 1935-36 data.
- 8. Farm-Housing Survey, Department of Agriculture, Miscellaneous Publication no. 323, pp. 11 and 15.
- 9. Farm Tenancy, Report of the President's Committee, 1937, p. 7.
- 10. The Nation's Health, Interdepartmental Committee to Coordinate Health and Welfare Activities, 1939, p. 36; also available as House Document no. 120 of 76 Congress I.
- 11. Ibid., pp. 28 and 30.
- 12. Report of the Advisory Committee on Education, February, 1938, p. 9.
- 13. Ibid., pp. 25-26.
- 14. Farm Tenancy, Report of the President's Committee, pp. 64-65.

CHAPTER II: Pages 17 to 37.

- "The designation 'surplus value' is given by Marx to the increase over the original value of money that is put into circulation.... In order that he may be able to receive surplus value, 'Moneybags must... find in the market a commodity whose use-value has the peculiar quality of being a source of value'—a commodity, the actual process of whose use is at the same time the process of the creation of value. Such a commodity exists. It is human labour power. Its use is labour, and labour creates value....Having bought labour power, the owner of money is entitled to
 - use it, that is to set it to work for the whole day-twelve hours, let us suppose.

Meanwhile, in the course of six hours ('necessary' labour time) the labourer produces sufficient to pay back the cost on his own maintenance; and in the course of the next six hours ('surplus' labour time), he produces a 'surplus' product for which the capitalist does not pay him—surplus product or surplus value." Lenin, "Karl Marx," *Collected Works*, XVIII, pp. 30-31, with quotation from Marx, *Capital*, I (International edition, 1939), p. 145.

- 1a. Federal Reserve Board, Eighteenth Annual Report, 1931, p. 127.
- 2. See estimate by L. C. Gray of Department of Agriculture, in American Economic Review, Supplement, March, 1923. Gray referring to January, 1920, before land prices had begun to decline, included farm land at current price and a very generous estimate of non-farm wealth owned by farmers. He concluded that per capita wealth of farm population was less than two-thirds that of non-farm population. The farmers' position has been greatly worsened since 1920.
- 3. Secretary of Agriculture Henry A. Wallace, Annual Report, 1938, p. 3.
- 4. Agricultural Statistics, 1939, pp. 484-487.
- 5. National Industrial Conference Board, The Agricultural Problem in the United States, 1926, p. 46; Statistical Abstract of the United States, 1936, p. 55. Census of 1920, taken January 1, gave 25.6%. N.I.C.B. estimates 29% as of June 1, date of all censuses up to 1900. The 1930 figure refers to April 1.
- 6. According to Census of Agriculture, horses, mules and asses on farms were reduced by 6,337,706, or 25%, between 1920 and 1930. Much greater has been decline in horses used in towns and cities. Their number is now estimated at "about 100,000" as against some three million before the World War. For city estimate, New York Times, Nov. 21, 1937.
- 7. National Bureau of Economic Research, Publication no. 23, Production Trends in the United States since 1870, by Arthur F. Burns, pp. 263 ff. Burns gives four different authorities for estimates of trend in crop production. These estimates range from 2.2% to 2.5% yearly.
- 8. Brookings Institution, Institute of Economics, Publication no. 55, America's Capacity to Produce, p. 547; for population, Statistical Abstract of the United States, 1936, p. 2.
- 9. Based on "value added by manufacturing," in *Statistical Abstract* of U. S., 1938, p. 749, and gross value of farm products, in *Census* of *Agriculture*, 1900 and 1930, with estimate added for farms whose value of products in 1929 was not reported.
- 10. D. B. Warden, quoted by E. L. Bogart in Economic History of the American People, 1930 ed., p. 393.
- 11. The census reported separately numbers of farms having horses and those having mules but did not show the extent of overlapping. Combined totals for 1900 were at least equal to total number of farms in all sections except the Atlantic states. Among the white farmers they left about 10% in the Northeast and 2% in the South operating without horses or mules in 1900. About 24% of the coloured farmers reported neither horse, ass or mule, but many of these farmers were sharecroppers who may have been using animals owned by the landlord. Summary tables, pp. cxcii fl. in vol. 5 of Twelfth Census.
- 12. H. W. Quaintance, "The Influence of Farm Machinery on Production and Labour," Publications of the American Economic Association, Third Series, vol. V, no. 4, p. 29.
- 13. National Resources Committee, Technological Trends and National Policy, 1937, p. 101.

- 14. No census data since 1930. WPA, National Research Project, Report A-9, Changes in Farm Power and Equipment: Tractors, Trucks and Automobiles, pp. 73, 78, estimates a total of 1,314,042 tractors on farms in 1937, an increase of about 43% since 1930. In that year, the number of tractor farms was 92% of the number of tractors. Possibly the increased production of small tractors has increased the relative number of one-tractor farms. Relating 95% of the estimated number for 1937 to the 6,812,000 farms reported in the 1935 census, we have a rough basis for our "over one in six." Trade estimates for 1938 showed a larger figure which would bring the number of tractor farms up to at least one farm in five. (See Chapter vii, p. 172.)
- 15. Brookings Institution, Institute of Economics, America's Capacity to Produce, p. 38; and Witt Bowden, Three Decades of Farm Labour, U. S. Bureau of Labour Statistics, Serial R. 976, p. 32.
- 16. National Resources Committee, op. cit., p. 99.
- 17. "... that which determines the magnitude of the value of any article is the amount of labour socially necessary, or the labour-time socially necessary for its production.... Commodities, therefore, in which equal quantities of labour are embodied, or which can be produced in the same time, have the same value. The value of one commodity is to the value of any other, as the labour-time necessary for the production of the one is to that necessary for the production of the other." Karl Marx, *Capital*, I (International edition, 1939), p. 6.
- 18. Agricultural Situation, November, 1938, p. 11.
- 19. Federal Trade Commission, Agricultural Income Inquiry, 1937, I, pp. 339 f.
- 20. American Economic Review, Supplement, March, 1933, p. 5.
- 21. Averages computed from yearly figures, Agricultural Statistics, 1939, pp. 496-497.
- 22. Federal Trade Commission, Agricultural Implement and Machinery Industry, 1938, pp. 926-928.
- 23. Derived from Agricultural Statistics, 1939, pp. 496-499.
- 24. Table derived from Agricultural Situation, October, 1937, and October, 1939.
- 25. Federal Trade Commission, Agricultural Income Inquiry, 1937, I, pp. 6, 7, 10, 224, 260.
- 26. Ibid., pp. 82, 92.
- 27. Press release on speech by Gardner Jackson at People's Lobby Dinner, New York City, April 20, 1937.
- 28. In his estimate of farm wealth as of 1920, L. C. Gray assumed that farmers held about four and a quarter billions of non-farm investments. Even if such an estimate could be accepted as valid for 1929—after a decade of increasing difficulties in agriculture—it would have meant perhaps two hundred millions of non-farm income from investment to offset the more than one and a half billion paid in the year by farmers to non-farm landlords, mortgagees and banks. For Gray estimate, see American Economic Review, Supplement, March, 1923.
- 29. Brookings Institution, Institute of Economics, Publication no. 56, America's Capacity to Consume, p. 234.
- 30. Ibid., pp. 228 and 231.
- 31. National Industrial Conference Board, op. cit., p. 46, and Brookings, America's Capacity to Consume, p. 21.
- 32. Brookings, op. cit., p. 21.
- 33. Department of Commerce, National Income, 1929-37, pp. 41-42.
- 34. Facts for Farmers, April, 1939.

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CHAPTER III: Pages 38 to 74.

- 1. Statistical material in this chapter is based on census data and *Statistical Abstract* of the United States, unless otherwise noted.
- 2. Derived from Farm Mortgage Indebtedness in the United States, Cooperative Survey by Bureau of the Census and Bureau of Agricultural Economics (processed, series US-48; released August, 1937).
- 3. U. S. House of Representatives, 75: I, Document no. 144, The Future of the Great Plains, p. 4; U. S. Senate, 74: II, Document no. 199, The Western Range, especially p. 253.
- 4. Much land in California and along the Mexican border to the Gulf was owned in large tracts before these regions were added to the United States. Except in California, few titles had been established north of the border territory. See B. H. Hibbard, *A History of the Public Land Policies*, 1924, pp. 28 ff., and California Commission of Immigration and Housing, *A Report on Large Landholdings in* Southern California, with Recommendations, 1919, pp. 13 ff.
- 5. The Future of the Great Plains, p. 3.
- 6. Ibid.
- 7. For the movements and decisions during the first decade after the Civil War, see *Reconstruction*, by James S. Allen, 1937.
- 8. W. E. B. DuBois, The Negro Landholder of Georgia, Department of Labour Bulletin 35, 1901, p. 668.
- 9. Works Progress Administration, Research Monograph V, Landlord and Tenant on the Cotton Plantation (Woofter), p. 63.
- 10. C. S. Johnson and others, The Collapse of Cotton Tenancy, p. 32.
- 11. Ibid., p. 9.
- 12. WPA, op. cit., p. xxvii.
- 13. Fortune, March, 1937.
- 14. WPA, op. cit., p. 51.
- 15. Ibid., p. 212.
- 16. *Ibid.*, p. 52.
- 17. C. S. Johnson and others, op. cit., p. 32.
- 18. Ibid., p. 47.
- 19. WPA, op. cit., p. 7.
- 20. These group dividing lines are the best available when the income figures are corrected for the change in prices of farm products. We multiply the 1899 figures by 2.29 to arrive at gross farm incomes representing a volume of production roughly comparable with the volume of production indicated by any given gross income figure for 1929. The slight discrepancies in the following parallel groupings tend to understate the trend toward large farms.

INCOME GROUPINGS

	1899	Equivalent, 1929	Nearest available, 1929
Group D	Under \$250	Under \$573	Under \$600
Group C	\$250-\$499 \$500-\$999	\$573-\$1,143 \$1,145-\$2,288	\$600-\$2,499
Group B	\$1,000-\$2,499	\$2,290-\$5,725	\$2,500-\$5,999
Group A	\$2,500 and over	\$5,730 and over	\$6,000 and over

REFERENCE NOTES

CHAPTER IV: Pages 75 to 116.

- 1. Agricultural Statistics, 1937, p. 384.
- 2. Yearbook of Agriculture, 1932, p. 419.
- 3. Wall Street Journal, August 12, 1938.
- 4. The special report on large-scale farming published by the Census Bureau on the basis of data from the 1930 census, tabulated certain items for 7,875 farms representing the largest in each type of farming and each section of the country. It showed only 10 with gross incomes of \$1,000,000 or more, and judging from the basis of selection the total number in this topmost income group could not have been much greater than the number included in this special study.
- 5. "Some Economic and Social Accompaniments of the Mechanisation of Agriculture," American Economic Review, Supplement, March, 1930.
- 6. Works Progress Administration, National Research Project, Report A-8, Trends in Employment in Agriculture, 1909-1936, pp. 11, 153.
- 7. Witt Bowden, in Monthly Labour Review, June, 1939.
- 8. WPA, Trends in Employment in Agriculture.
- 9. Distribution of output is estimated from reported distribution of farms by gross income. Allowance is made for the irregularities in interval and in size of groups. For unclassified farms, see Appendix D.
- 10. Frank J. Taylor, in The Commentator, November, 1938.
- 11. New York Times, July 20, 1937.
- 12. Fortune, March, 1937.
- 13. New York Herald-Tribune, February 17, 1939.
- 14. New York Times, December 26, 1937.
- 15. Agricultural Situation, March, 1939, p. 14.
- 16. Secretary of Agriculture, Annual Report, 1938, p. 70.
- 17. National Resources Board, A Report on National Planning and Public Works, Government Printing Office, 1934, p. 18.
- 18. U. S. Senate, 74:II, Document no. 274, p. 11.
- 19. The Reader's Digest, December, 1938, p. 25.
- 20. Ralph Wallace, "New Life for a Million Acres," in The Country Home Magazine, October, 1938; Wall Street Journal, April 4, 1939.
- 21. Bureau of Agricultural Economics, Large-Scale Farming in the United States, April, 1938, mimeographed.
- 22. Census Bureau, Manufacture and Sale of Farm Equipment and Related Products. Annual.
- 23. Wall Street Journal, June 8, 1938, and 1938 Report of Rural Electrification Administration.

CHAPTER V: Pages 117 to 141.

- 1. What actually happened to the French peasants in the 19th century, and how they came into bondage to French capitalists, are vividly described by Marx in *The Class Struggles in France* (Marxist Library, International Publishers, vol. XXIV) p. 117, and in *The Eighteenth Brumaire of Louis Bonaparte* (same edition, vol.
- XXXV) pp. 111 ff.
- 2. See chapter by Marx on "Genesis of Capitalist Ground-Rent" (especially pp. 917-

946) in third volume of *Capital* (Kerr edition); and third chapter of *Development* of *Capitalism in Russia*, in Lenin, *Selected Works*, vol. I.

- 3. On survivals of rent in kind within capitalist farming, see Marx, Capital (Kerr ed.), III, 915.
- 4. The high rate of monopoly profit is sometimes blurred by inflated capitalisation, but when gross profit of large companies is related to the capital actually employed in production this general rule becomes clear. National Bureau of Economic Research, in its Bulletin 55, showed also that even in the limited sense of profits on stock the large corporations maintained during the crisis of 1929-33 a consistently higher rate of return than the small concerns.
- 5. Secretary of Agriculture, Annual Report, 1938, p. 7.

CHAPTER VI: Pages 142 to 162.

- 1. K. D. Lumpkin and D. W. Douglas, Child Workers in America, p. 60.
- 2. National Child Labour Committee, The American Child, November, 1937.
- 3. Department of Agriculture, Miscellaneous Publication 265, 1937, p. 2.
- 4. Works Progress Administration, Research Monograph VII, The Migratory-Casual Worker (1937); and WPA, Division of Research, Special Report, Migratory Cotton Pickers in Arizona (1939).
- 5. WPA, The Migratory-Casual Worker, p. 89.
- 6. Ibid., p. 90.
- 7. Farm Security Administration, Region IX, Migrant Farm Labour: The Problem and Ways of Meeting It (mimeographed), 1939, p. 1.
- 8. Ibid.
- 9. Carey McWilliams, Factories in the Field, p. 308.
- 10. WPA, The Migratory-Casual Worker, p. 30.
- 11. Witt Bowden, Three Decades of Farm Labour, p. 9.
- 12. WPA, Trends in Employment in Agriculture, p. 18.
- 13. Farm Security Administration, Region IX, op. cit., p. 6.
- 14. Witt Bowden, op. cit., p. 15.
- 15. Ibid., p. 18.
- 16. WPA, Migratory Cotton Pickers in Arizona.
- 17. National Child Labour Committee, Pick for Your Supper: A Study of Child Labour Among Migrants on the Pacific Coast, 1939.
- 18. Carey McWilliams, "The Joads on Strike," The Nation, November 4, 1939.
- 19. National Child Labour Committee, op. cit.
- 20. Ibid.
- 21. Louisiana Union Farmer, November, 1939.
- 22. Ibid.
- 23. National Child Labour Committee, A Summer in the Country. 1939.
- 24. N. A. Tolles, "A Survey of Labour Migration Between States," Monthly Labour Review, July, 1937.
- 25. California State Relief Administration, Migratory Labour in California, 1936. p. 119.
- 26. Farm Security Administration, Region IX, op. cit., p. 14.
- 27. Ibid., p. 5.
- 28. WPA, Migratory Cotton Pickers in Arizona, p. 5.
- 29. National Child Labour Committee, A Summer in the Country.

REFERENCE NOTES

- 30. Federated Press release, November 3, 1939.
- 31. Paul F. Brissenden, The I.W.W., 1920, p. 340.
- 32. U. S. House of Representatives, 74: I, Hearings before Committee on Labour on H.R. 6288 (1935), pp. 342 fl.
- 33. The Rural Observer, San Francisco, September-October, 1938.
- 34. See, for example, Carey McWilliams, Factories in the Field, Chapter II.

CHAPTER VII: Pages 163 to 182.

- 1. U. S. Congress, 75: I, Senate Committee on Appropriations, *Hearings* on Emergency Relief Appropriation, H. J. Res. 361, June 9, 1937, p. 265. Census of 1930 reported 1,681,667 farms with less than \$600 gross income, and 288,766 unclassified farms of which half, at least, were in this very poor group. Total increase in number of farms between 1930 and 1935 was 523,702, of which 336,162 had less than 20 acres.
- 2. Labour Research Association, Labour Fact Book II, p. 142.
- 3. Lenin, Selected Works, vol. XII, p. 68.
- 4. Some 454,000 according to the Supplementary Report of the Land Planning Committee to the National Resources Board (1935) on "Maladjustments in Land Use in the United States." Some 586,000, according to the report on Disadvantaged Classes in American Agriculture published in April, 1938, by the Farm Security Administration and the Bureau of Agricultural Economics, cooperating.
- 5. National Resources Board, op. cit., p. 14.
- 6. Paul S. Taylor, "Power Farming and Labour Displacement in the Cotton Belt," Monthly Labour Review, March and April, 1938.
- 7. Based on 3-year average, 1929-30-31, in operations at the Delta Experiment Station. Mississippi Agricultural Experiment Stations, Bulletin 298, June, 1932, p. 12.
- 8. Works Progress Administration, National Research Project, Report No. A-4, Changes in Technology and Labour Requirements in Crop Production: Potatoes, 1938. Also, New York Times, August 27, 1938.
- 9. National Resources Board, Supplementary Report of the Land Planning Committee, Part I, "General Conditions and Tendencies Influencing the Nation's Land Requirements," 1936, p. 46.
- 10. Bureau of Agricultural Economics, Division of Crop and Livestock Estimates, Large and Small Dairy Herds, A Summary of Statistics Regarding Their Relative Importance and Factors Related Thereto, March, 1934, mimeographed.
- 11. Computed from Census of Agriculture, 1935, vol. III, pp. 380-383.
- 12. National Resources Board, op. cit., p. 42.
- 13. National Resources Committee, Technological Trends and National Policy, 1937, p. 105.
- 14. Derived from National Resources Board, Supplementary Report of Land Planning Committee, Part I, 1936, p. 5.
- 15. National Resources Board, A Report on National Planning and Public Works, 1934, p. 175.
- 16. Kentucky Agricultural Experiment Station, Bulletin 375, Family Incomes and Land Utilisation in Knox County, 1937, p. 163.

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CHAPTER VIII: Pages 183 to 199.

- 1. Yearbook of Agriculture, 1924, p. 219.
- 2. Department of Agriculture, Technical Bulletin 521, Agricultural Loans of Commercial Banks, p. 3.
- 3. Department of Agriculture, Technical Bulletin 575, Demand Deposits of Country Banks, p. 25.
- 4. Agricultural Statistics, 1938, p. 443.
- 5. 73rd Congress, I, House Document no. 9, The Farm Debt Problem, p. 9.
- 6. Proceedings, Second International Conference of Agricultural Economists, 1930, p. 252.
- 7. Ibid., p. 254
- 8. Yearbook of Agriculture, 1924, p. 191.
- 9. Agricultural Situation, January, 1936.
- 10. Twentieth Century Fund, Facing the Tax Problem, 1937, pp. 232-234.
- 11. Department of Agriculture, Circulars (new series), 209, 261, 417.
- 12. Agricultural Statistics, 1939, p. 490; Yearbook of Agriculture, 1935, p. 675; 1932, p. 894; 1927, p. 1133.
- 13. E. DeS. Brunner and J. H. Kolb, Rural Social Trends, 1933, p. 42.
- 14. Farm Security Administration, Social Research Report IV, Social Status and Farm Tenure, 1938, p. 9.
- 15. Labour Research Association, Labour Fact Book II, p. 142.
- Agricultural Statistics, 1939, p. 490; 1937, p. 394; 1936, p. 340. Yearbook of Agriculture, 1934, p. 700; 1932, p. 894; 1930, p. 972; 1928, p. 1038; 1927, p. 1133; 1925, p. 1342.

CHAPTER IX: Pages 200 to 223.

- 1. Agricultural Statistics, 1939, pp. 18, 23; Bureau of Agricultural Economics, The Wheat Situation (mimeographed), November 25, 1939.
- 2. Wall Street Journal, November 15, 1939.
- 3. New York Times, January 15, 1939; Agricultural Situation, May, 1939.
- 4. Farm price, derived from Agricultural Statistics, 1939, p. 10; flour and bread, Bureau of Labour Statistics, Serial R. 886, Retail Prices, January, 1939, p. 11; and Statistical Abstract of the U. S., 1938, p. 316.
- 5. F.T.C., Agricultural Income Inquiry, 1937, I, pp. 330 fl.
- 6. Ibid., p. 335.
- 7. Ibid., p. 350.
- 7a. Ibid., pp. 279, 281, with percentage corrected by final figure for 1934 commercial wheat in Agricultural Statistics, 1939, p. 19.
- 8. Ibid., pp. 291-292.
- 9. Ibid., p. 818.
- 10. Ibid., pp. 826, 829.
- 11. Ibid., p. 821.
- 12. U. S. Grain Corp., The Stabilisation of the Price of Wheat During the War, F. M. Surface, 1925, p. 25.
- 13. F.T.C., Agricultural Income Inquiry, 1937, I, pp. 39-42.
- 14. U. S. Statutes at Large, vol. 52, 1938, p. 819.

- 15. Ibid., p. 43.
- 16. Commodity Year Book, 1939, p. 194.
- 17. Agricultural Situation, April, 1939, pp. 18-20.
- 18. Commodity Year Book, 1939, p. 218.
- 19. F.T.C., Agricultural Income Inquiry, 1937, I, p. 313.
- 20. Ibid., pp. 86, 97.
- 21. Ibid., p. 372.
- 22. Farm price index is computed from prices estimated by Department of Agriculture, in Agricultural Statistics, 1939, p. 103. Wholesale price of cotton goods is Bureau of Labour Statistics index, given on 1926 base and recomputed to 1923-25 base. See Statistical Abstract of the U.S., 1938, p. 308; 1934, p. 285; 1929, p. 325; and Bureau of Labour Statistics, Serial R. 882, Wholesale Prices, December and Year 1938.
- 23. New York Times, June 28, 1939.
- 24. Ibid., June 24, 1939.
- 25. Ibid., July 22, 1939.
- 25a. Secretary of Agriculture, Annual Report, 1939, p. 93.
- 26. Secretary of Agriculture Henry A. Wallace, New Republic, Nov. 8, 1939.
- 27. Wall Street Journal, January 3, 1940, quoting report from Department of Agriculture, office of foreign agricultural relations, to Agricultural Advisory Council.

CHAPTER X: Pages 224 to 243.

- 1. Computed from Agricultural Statistics, 1938, p. 329.
- 1a. Agricultural Adjustment 1933 to 1935, p. 234.
- 2. Secretary of Agriculture, Annual Report, 1933, p. 39.
- 3. F.T.C., Agricultural Income Inquiry, 1937, I, p. 198.
- 4. Substance of Packers' Consent Decree is summarised in F.T.C., Agricultural Income Inquiry, 1937, I, p. 208. For a brief record of history of big packers and methods by which they obtained control, see pp. 196 ff., same report.
- 5. F.T.C., Agricultural Income Inquiry, 1937, I., pp. 208-210.
- 6. Ibid., p. 191.
- 7. Ibid., p. 1015.
- 8. City food prices, from U. S. Bureau of Labor Statistics reports on Retail Prices. Prices at the farm, from Agricultural Statistics.
- 9. F.T.C., Agricultural Income Inquiry, 1937, I., p. 77.
- 10. Rates of return on investment in the business as revised by F.T.C. to exclude appreciation. See its Agricultural Income Inquiry, 1937, I, p. 871. Companies are Swift & Co.; Armour & Co.; Wilson & Co., Inc.; Cudahy Packing Co.; John Morrell & Co., Inc.; Hygrade Food Products Corporation; Kingan & Co., Inc.; George A. Hormel & Co.; The Rath Packing Co.; Jacob Dold Packing Co.; Adolf Gobel, Inc.
- 11. Computed from Price Spreads Between the Farmer and the Consumer, by Been and Waugh, Department of Agriculture (mimeographed), 1936, and Supplement, 1939.
- 12. In the 1930 census classification of farms according to chief source of income, 604,-837 were reported as "dairy farms," while 2,278,021 other farms also reported some sales of milk or dairy products.
- 13. Agricultural Statistics, 1939, pp. 374-377. Estimate does not include milk produced by cows in villages and small towns, not on farms.

- 14. Federal Trade Commission, report to Temporary National Economic Commission on Concentration of Control over Sales and Distribution of Milk and Dairy Products, TNEC Release no. 14, October 25, 1939, p. 12.
- 15. Department of Agriculture, The Dairy Outlook for 1939 (Stine), mimeographed, February, 1939, p. 3.
- 16. Agricultural Statistics, 1939, pp. 385, 387.
- 17. Department of Agriculture, The Dairy Outlook for 1939 (Stine).
- 18. Agricultural Statistics, 1938, p. 346.
- 19. Agricultural Adjustment Administration, Consumers' Counsel Division, A Survey of Milk Consumption in 59 Cities in the United States, June, 1936, p. 111.
- 20. Department of Agriculture, Circular 296, November, 1933, Diets at Four Levels of Nutritive Content and Cost (Stiebling and Ward), p. 13.
- 21. John J. Bennett, Jr., Attorney General of New York State, Report on the Milk Industry of the State of New York with Particular Reference to the New York Metropolitan Area, March 3, 1938, p. 44.
- 22. Federal Trade Commission, Report on Sale and Distribution of Milk and Milk Products in Connecticut and Philadelphia Milksheds, April 5, 1935, p. 75.
- 23. Wall Street Journal, July 21, 1939.
- 24. Bennett, op. cit., p. 98.
- 25. Testimony of Dr. Frederic C. Howe, advisor to the Federal Trade Commission and former consumers' counsel of Agricultural Adjustment Administration, before Temporary National Economic Committee, *New York Times*, March 10, 1939.
- 26. Facts for Farmers, July, 1939.
- 27. Price Spreads Between the Farmer and the Consumer (Been and Waugh), mimeographed, 1936, and Supplement, 1939.
- 28. Bennett, op. cit., p. 103.
- 29. Ibid., p. 3.
- 30. These figures, from F.T.C., Agricultural Income Inquiry, 1937, Part I, p. 853, refer to rate of return on investment in the business as revised by the F. T. C. They are based on a group of 10 companies: National Dairy Products Corporation; The Borden Co.; Golden States Co., Ltd.; Beatrice Creamery Co.; Carnation Co.; Pet Milk Co.; Creameries of America, Inc.; The Fairmont Creamery Co.; North American Creameries, Inc.; Western Dairies, Inc.
- 31. For 1936 and 1937, U. S. Treasury figures as given in New York Times, April 8, 1939. For 1938, Securities and Exchange Commission figures as given in New York Times, May 16, 1939.
- 32. Wallace, The Dairy Dilemma, Agricultural Adjustment Administration, Publication G-7, 1934, p. 4.
- 33. F.T.C., Agricultural Income Inquiry, 1937, I, pp. 237, 241.
- 34. Ibid., pp. 228, 234.
- 35. Bennett, op. cit., p. 10.
- 36. F.T.C., op. cit., p. 234.
- 37. Wallace, The Dairy Dilemma, p. 3.
- 38. Agricultural Adjustment Administration, Publication G-50, 1935, p. 4.
- 39. New York Times, October 17, 18, and 22, 1939.
- 40. Wallace, op. cit., p. 9.
- 41. New York Times, June 6, 1939.
- 42. New York Times, November 16, 1938; June 14, 1939; December 4, 1939.

REFERENCE NOTES

CHAPTER XI: Pages 244 to 252.

- Index of agricultural production, with 1924-1929 as 100 is as follows: 1929—101; 1930—101; 1931—107; 1932—100. On the whole, livestock products were increasing; crop production was declining. See Agricultural Statistics, 1938, p. 428.
- 2. Harold Loeb and Associates, The Chart of Plenty, 1935, p. 76.
- 3. Agricultural Situation, January, 1939, p. 9.

CHAPTER XII: Pages 253 to 272.

- 1. E. P. Cheyney, "The Anti-Rent Agitation in the State of New York, 1839-1846," *Publications of the University of Pennsylvania, Political Economy and Public Law* Series, no. 2, 1887.
- 2. For the less known facts of the 1860's, see James S. Allen, *Reconstruction*, especially Chapter II. For current trends in the South, see Katharine D. Lumpkin, *The South in Progress*.
- 3. J. D. Hicks, The Populist Revolt, p. 105.
- 4. See full text of Omaha Platform and Resolutions, July, 1892, in Hicks, op. cit., p. 439.
- 5. See President's Message to Congress on farm relief, as given in New York Times, March 17, 1933.
- 6. Agricultural Finance Review, November, 1939.
- 7. For brief sketch of early cooperatives, see Federal Trade Commission's Letter of Submittal in its *Cooperative Marketing*, published by 70th Congress, I, as Senate Document no. 95. For development of cooperatives since the World War see FTC, *Agricultural Income Inquiry*, 1937, I, Chapter IX. Statistical data on cooperatives are published by Farm Credit Administration, Cooperative Division, in its *Statistical Handbook of Farmers' Cooperatives*.
- 8. FTC, Cooperative Marketing, p. xlii.
- 9. Ibid., p. 323.

1

- 10. Temporary National Economic Committee, Release no. 14, October 25, 1939, p. 14.
- 11. See file of Rural Observer, published by Simon J. Lubin Society, San Francisco.
- 12. Wall Street Journal, April 11, 1936, with reference to Senator McKellar's report to the U. S. Senate.
- 13. U. S. Senate 74:II, Document no. 274, Payments Made Under the Agricultural Adjustment Program, pp. 9 and 32-58.
- 14. New York Times, March 5, 1940.
- 15. Secretary of Agriculture Henry A. Wallace, Annual Report, 1939, p. 39.

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