

FARM-CITY MIGRATION AND INDUSTRY'S LABOR RESERVE

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L-7

**FEDERAL WORKS AGENCY
WORK PROJECTS ADMINISTRATION**

F. C. HARRINGTON
Commissioner

CORRINGTON GILL
Assistant Commissioner

NATIONAL RESEARCH PROJECT

on

Reemployment Opportunities and Recent Changes
in Industrial Techniques

DAVID WEINTRAUB
Director

Studies of the Effects of Industrial Change on Labor Markets

**FARM-CITY MIGRATION
AND INDUSTRY'S LABOR RESERVE**

by

Francis M. Vreeland
and
Edward J. Fitzgerald

WORK PROJECTS ADMINISTRATION, NATIONAL RESEARCH PROJECT

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THE WPA NATIONAL RESEARCH PROJECT ON REEMPLOYMENT OPPORTUNITIES AND RECENT CHANGES IN INDUSTRIAL TECHNIQUES

Under the authority granted by the President in the Executive Order which created the Works Progress Administration, Administrator *Harry L. Hopkins* authorized the establishment of a research program for the purpose of collecting and analyzing data bearing on problems of employment, unemployment, and relief. Accordingly, the National Research Program was established in October 1935 under the supervision of *Corrington Gill*, Assistant Administrator of the WPA, who appointed the directors of the individual studies or projects.

The Project on Reemployment Opportunities and Recent Changes in Industrial Techniques was organized in December 1935 to inquire, with the cooperation of industry, labor, and governmental and private agencies, into the extent of recent changes in industrial techniques and to evaluate the effects of these changes on the volume of employment and unemployment. *David Weintraub* and *Irving Kaplan*, members of the research staff of the Division of Research, Statistics, and Finance, were appointed, respectively, Director and Associate Director of the Project. The task set for them was to assemble and organize the existing data which bear on the problem and to augment these data by field surveys and analyses.

To this end, many governmental agencies which are the collectors and repositories of pertinent information were invited to cooperate. The cooperating agencies of the United States Government include the Department of Agriculture, the Bureau of Mines of the Department of the Interior, the Bureau of Labor Statistics of the Department of Labor, the Railroad Retirement Board, the Social Security Board, the Bureau of Internal Revenue of the Department of the Treasury, the Department of Commerce, the Federal Trade Commission, and the Tariff Commission.

The following private agencies joined with the National Research Project in conducting special studies: the Industrial Research Department of the University of Pennsylvania, the National Bureau of Economic Research, Inc., the Employment Stabilization Research Institute of the University of Minnesota, and the Agricultural Economics Departments in the Agricultural Experiment Stations of California, Illinois, Iowa, and New York.

**FEDERAL WORKS AGENCY
WORK PROJECTS ADMINISTRATION
1734 NEW YORK AVENUE NW.
WASHINGTON, D. C.**

F. C. HARRINGTON

COMMISSIONER OF WORK PROJECTS

August 17, 1939

Colonel F. C. Harrington
Commissioner of Work Projects

Sir:

The migration of workers in America from one region to another has been a phenomenon of increasing significance to our economy, bearing directly upon problems of unemployment and relief both locally and nationally. Particularly as employment opportunities have diminished or disappeared in one section, many of the persons formerly located there have taken to the road to seek jobs they knew or hoped were somewhere else. Often they have not found them. Frequently they have become part of a transient or perpetually migratory population, chronically unemployed or subsisting uncertainly on casual work and relief.

A number of reports prepared for the WPA have considered various aspects of the specific problems that arise out of this migration. One has dealt with the extent and nature of rural migration in the United States, another with the characteristics of migrant families. Others have considered the fortunes of the migratory casual worker, the migratory cotton picker, the transient unemployed. The report presented herewith deals particularly with the nature of the farm-city population movement and its relation to the employment needs and unemployment hazards of the industrial labor market.

For many years there has been an annual flow of between 1 and 2 million persons from the farms to the cities of this country. There has also been a countermovement reducing to some extent the net gain made by the cities. The net transfer has, however, been sufficiently substantial to result in a decline of the farm population by more than 2 million persons in the two decades preceding 1929, in spite of a rate

of natural increase which might have been expected to result in a large increase of the population on farms.

It has been possible for agriculture to produce a constantly expanding volume of goods without the use of the labor of all the persons growing up in rural regions. These persons have in this sense been "released" from agriculture and "free" to seek employment in the labor market of industry. However, the element of choice was in large part nonexistent or very narrow. In general these "released" people were turning to the city from situations where economic pressures of various types and degrees were impelling them to search for other and more satisfactory ways of earning a living. The land was often not providing them with even minimum support.

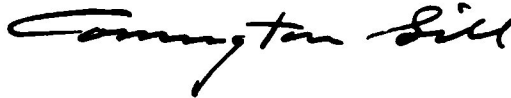
The evidence presented here shows that because of the economic pressures which developed in agriculture, migration to the cities has resulted. This has meant a tremendous expansion of the labor reserve available to industry. In the cities the immigrant from the farm has characteristically been able to find employment only where the demand for new and unskilled workers has been increasing or when for various reasons other workers were being replaced. Even in periods of prosperity many of the migrants have faced economic problems as great as or greater than those they left. They have formed part of industry's reserve pool of unemployed or intermittently employed. This pool has been swollen by the continued flow from the land and by the growth of unemployment in the cities. The result has been a constant countermovement from the cities to the land.

The retreat to the land, however much it may have been eulogized, has represented no more adequate a solution to urban unemployment problems than has the flight from the land to rural problems. Much of it has been of temporary character, represented by the growth of small subsistence-farming efforts near large cities. Much of it has meant a return to the problem conditions which the migrant earlier had left. Although they left the cities, these workers still constituted an unemployed labor reserve and the passage of time continually reduced their chances of finding jobs.

The development of severe depression conditions in the cities has added to the complexity of the problems of which the migration movement has been symptomatic. Dammed up on the land are countless young people who in recent years would have moved to the cities had conditions there warranted the hope that they might find employment. These too constitute a reserve for industry, one that has not yet been tapped, but which is growing with the continuation of the conditions in agriculture which impel movement and the conditions in industry which restrict it.

The nature of these conditions, the economic pressures which give rise to the large number of farm-to-city and city-to-farm migrants, accounts for the status as a labor reserve of both the migrants and the potential migrants. Because of this status the group represents a substantial portion of those who constitute the problem of unemployment and relief. The problem cuts across industrial and geographic lines, and is one of the reasons why effective programs for relief, occupational rehabilitation and training, and employment-office work must be national rather than local in scope.

Respectfully yours,

A handwritten signature in cursive script that reads "Corrington Gill". The signature is written in black ink and is positioned centrally below the typed name.

Corrington Gill
Assistant Commissioner

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PREFACE

The flow of population in the United States from one region to another has commanded the attention of many research workers who have looked at it from various points of view. The possible effects of migration upon the future growth and composition of the population have been studied. Its influence upon the cultural values that have been identified with the rural as opposed to the urban way of life have been considered. The motivations, attitudes, and individual characteristics and fortunes of migrants have been investigated. Various proposals for restricting or guiding the migration flow have been put forth. The present report is concerned with an analysis of the economic factors which account for the movement between farm and city, and with the relationships between these factors and the size and character of the labor force available to industry and the problems of unemployment in the industrial labor markets.

The demand for labor in agriculture has been steadily declining relative to the demand for labor in nonagricultural fields. The agricultural studies of the National Research Project have dealt with the changes in production, productivity, and employment opportunities that have occurred in the major fields of agriculture, as well as with general trends in agricultural output and employment. Their findings point to the lack of sufficient farm employment opportunities to absorb the working population that is growing up on the land. Millions of persons have moved toward the cities.

On the other hand hundreds of thousands have at the same time been moving toward the land. The demand for labor in industry is constantly changing in volume, character, and location. The Project's studies of the effects of industrial changes on labor markets have devoted attention to the experiences of workers in selected industrial situations and to the volume, character, and incidence of unemployment and their relation to important factors in the labor-market situation.

The purpose of this report is to analyze the economic conditions on the land and in the cities under which the two-way flow of population has occurred with a view to casting light

on the economic role that this migration has been playing. The questions posed are: Under what circumstances has migration from the land to the cities occurred? What role has the migrant played in the industrial labor market? Under what circumstances has movement from the cities to the land occurred?

In the preparation of this report considerable use was made of material collected for other studies conducted by the Project. In addition, generous use was made of the findings of other writers on the problem of migration, although the interpretation of this material is solely the Project's responsibility. Certain considerations, important in studies designed for other purposes than this one, have been neglected here except insofar as they bear upon the stated purpose. For example, the individual motives and attitudes of persons who have migrated are considered less fully than the objective circumstances under which their movement occurred.

The report was prepared by Francis M. Vreeland and Edward J. Fitzgerald under the guidance of Irving Kaplan in his capacity as Associate Director of the Project. The completed manuscript was edited and prepared for publication under the supervision of Edmund J. Stone.

DAVID WEINTRAUB

PHILADELPHIA

August 16, 1939

CHAPTER I

INTRODUCTION

THE EXTENT OF MIGRATION

The migration of population from farm to city, though it has recently assumed the aspects of a "problem" in the United States, is not a new phenomenon. From the earliest days of industrial development such movement has been an important and inevitable concomitant of the industrialization of society. Many industrial cities of Europe and of the United States were initially populated largely by workers who had left the land to seek a place in industry. Today, under altered conditions, a like process goes on. In the United States from 1 to 2 million persons each year take the road from the farm to the industrial labor market.

From its beginning this translation of great sections of the agricultural population into an industrial labor supply has rested upon the ability of a decreasing proportion of the world's workers to produce, with the aid of developing technology, an ever greater volume of foods and industrial raw materials. The actual migration of population, however, has occurred under changing circumstances and has been directly occasioned by changing factors. In early Europe, particularly England, enclosure of the land was, for example, one important factor in depriving the people of their place on the land and in driving them toward the growing industrial centers.¹ Generally, however, the pressures which have set people on the road from the land where they cannot secure adequate livelihood toward the cities where they hope to find employment have been less direct but no less effective. Furthermore, today it is

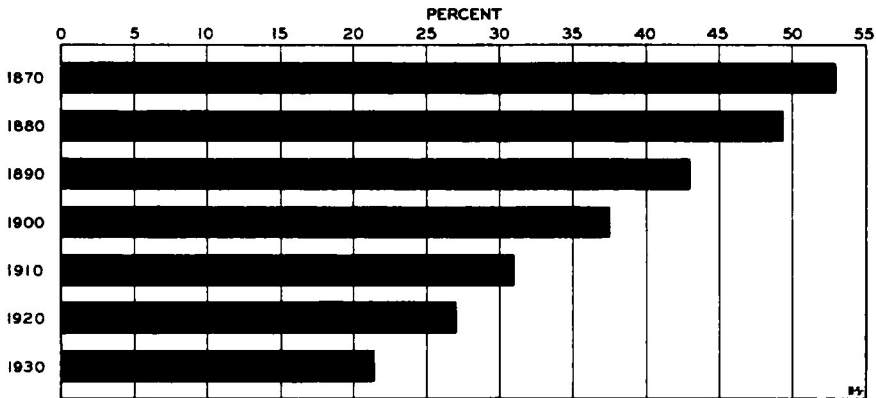
Note.—The authors wish to acknowledge their indebtedness to Alice Rush, who aided in the assembling of some of the data used and in the preparation of the final manuscript.

¹In England ". . . the enclosure of the common lands upon the use of which the cottager class had been largely dependent, the reduction of many men to the status of wage-earning agricultural laborers, and the driving of many from agricultural employment altogether. . . . began toward the close of the eighteenth century and had run its course practically by 1845." (F. A. Ogg, *Social Progress in Contemporary Europe* (New York: The Macmillan Co., 1912), p. 83.) Mr. Ogg further notes (in *Economic Development of Modern Europe* (rev. ed.; New York: The Macmillan Co., 1932), pp. 153-4) that "whereas in 1811 the agricultural population formed thirty-four per cent. of the whole, in 1821 it formed but thirty-two per cent.; in 1831, twenty-eight per cent.; in 1841, twenty-two per cent.; in 1851, sixteen per cent.; and in 1861, ten per cent."

frequently not to a labor market which is expanding its demand for labor that the road leads, but to one already faced with an oversupply of workers, with unemployment and underemployment. These recent circumstances have thus underscored the problem, the roots of which lie deep in the history and development of our economy.

For a long time now, agricultural activity in the United States, measured either in terms of production or in terms of the number of gainful workers employed, has been relatively a declining section of the economy. In 1870 over half of all persons with gainful occupations were in agriculture. By 1930 this proportion had been reduced to little more than a fifth (figure 1 and table A-1). The total rural population has shown a similarly large decline relative to our total national population.

Figure 1.- PROPORTION OF GAINFULLY EMPLOYED PERSONS IN THE UNITED STATES HAVING AGRICULTURAL OCCUPATIONS, 1870-1930



BASED ON TABLE A-1

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Historically, the changes in the residential or occupational distribution of our population, exemplified by these figures, fall into two general periods. Until 1910 each census reported the population living on farms as a declining proportion of the total population; however, until sometime between 1910 and 1920 the farm population continued to increase absolutely. Thereafter it tended to decline absolutely as well as relatively. By 1929 the farm population was almost 2,000,000 persons smaller than it had been in 1910. This tendency was offset

in depression years, however, and the beginning of 1938 found a farm population which was a quarter of a million persons smaller than in 1916.²

The tendency for the farm population to decline, proportionally or absolutely, has not come about because of a fall in the rate of natural increase in rural America. Though declining, the rate of natural increase of our farm population has always been greater than that of our urban population. In 1930 the farm population included 50 percent more children than were estimated as being necessary to maintain that population permanently, whereas the cities had a rate of natural increase less than that needed to maintain their population. Indications are that this difference has persisted.³

The fact that, in spite of this, the population in rural America has been declining, proportionally and, later, absolutely, while the population in urban America has been increasing at a high rate testifies to the tremendous number of persons who have become involved in the migration movement from the land. In addition to being a source of food and industrial raw materials for the country, agricultural America has come to be an increasingly prominent source of the industrial labor supply. In some years the volume of net migration has been sufficiently large to exceed the high natural increase of the farm population and to produce an absolute decrease in population. In others it has been small enough in relation to the high natural increase so that the size of the farm population increased absolutely although it continued to decline proportionally.

This report is concerned principally with the problem of farm-city migration as it has been related to the industrial labor market since the World War. From 1920 to the present the net gain of the urban areas through migration from the farm has been, on the average, almost 450,000 persons annually. In the twenties the average net gain was over 625,000 persons per year. Subsequently, with the onset of the industrial depression, the net migration fell far below this average. Indeed, in 1932 it fell off to such an extent that there was

²*Farm Population Estimates, January 1, 1938* (U. S. Dept. Agr., Bur. Agr. Econ., mimeo., June 16, 1938), p. 8.

³O. E. Baker, *The Outlook for Rural Youth* (U. S. Dept. Agr., Bur. Agr. Econ., Ext. Service Cir. 223, mimeo., Sept. 1935), fig. 10.

a reversal and, for the first time, the farms received a net gain by migration from the cities. In the years that followed, the earlier trend reasserted itself and the farms began again to lose population to the cities in increasing numbers (table 1, page 6).

Basic to the changes accompanying this progressive decline in the agricultural proportion of our population has been the steady spread through rural America of the scientific and mechanical aids characteristic of industrial methods of production. With these aids it has been possible for American agriculture, with an ever smaller proportion of the Nation's workers, to supply to a growing population and economy the products needed for its sustenance and as industrial raw materials.

Agricultural machinery and equipment, animal power, tractor power, the automobile, and the motortruck have played their part in the continuous increase in the productivity of the average workman in agriculture. Allied with these have been such forces as the better breeding of animals and plants, the better understanding of the chemical composition and uses of the soil, the development of large-scale farming - in short, all the elements which make possible and accompany the extension of industrial methods and relations into agricultural production.

As the use of these methods and aids spread, the average workman on the farm was able in 1930 to produce 150 percent more than he could in 1870.⁴ More recent estimates presented by the National Research Project show that "from 1909 to 1929 the output per person working in agriculture increased 37 percent. This increased productivity made it possible for 7.5 percent fewer persons to produce an agricultural output which was 27 percent greater in 1929 than in 1909."⁵ The increasing use of the combined harvester-thresher has displaced most of the 100,000 to 200,000 migratory workers who formerly found employment in the wheat belts of the Great Plains.⁶ In the corn area in recent years an aggregate production of all crops 7 percent smaller than that of 1909 has been handled by a labor

⁴Carter Goodrich and Others, *Migration and Economic Opportunity* (Philadelphia, Pa.: University of Pennsylvania Press, 1936), p. 397.

⁵Eldon E. Shaw and John A. Hopkins, *Trends in Employment in Agriculture, 1909-36* (WPA National Research Project, Report No. A-8, Nov. 1938), p. VI.

⁶Robert B. Elwood and Others, *Changes in Technology and Labor Requirements in Crop Production: Wheat and Oats* (WPA National Research Project, Report No. A-10, Apr. 1939), pp. 94-6.

force 20 percent smaller by the use of labor-saving equipment and methods.⁷

The decline in the amount of labor required for the production of many of the more important crops affords particularly striking evidence of the increasing productivity in agriculture. Over the past 25 years the labor required to produce a bushel of potatoes declined nearly 20 percent in important producing areas.⁸ Over a similar period the labor required per acre of wheat production declined more than 50 percent; that required per acre of oats, 37 percent.⁹ In the years 1933-36, 20 percent less labor was required to produce a bale of cotton than had been required a quarter of a century earlier.¹⁰ Similarly, corn production in the United States during the period 1932-36, though only slightly less than it had been approximately 25 years earlier, required 20 percent fewer man-hours of labor.¹¹ In the 20 years preceding the period 1933-36 the labor required to produce a ton of sugar beets declined by 22 percent.¹²

This reduction, through technological change and improved techniques of production, in the amount of labor that agriculture requires to create the products demanded of it is a prerequisite to the shift in population that has occurred. It cannot, however, account for it. Under appropriate conditions this reduction might well have resulted in increased leisure through a compensating reduction in the hours of work on the farm;¹³ actually, it resulted in migration.

When the detailed record of this migration from the early twenties to the present is examined, a number of its characteristics are revealing. Primarily, it is notable that it has been far larger than net figures indicate, for the net

⁷Shaw and Hopkins, *op. cit.*, p. 79.

⁸Harry E. Knowlton, Robert B. Elwood, and Eugene G. McKibben, *Changes in Technology and Labor Requirements in Crop Production: Potatoes* (WPA National Research Project, Report No. A-4, Mar. 1938), p. 68.

⁹Elwood and Others, *op. cit.*, pp. 89, 96.

¹⁰William C. Holley and Lloyd E. Arnold, *Changes in Technology and Labor Requirements in Crop Production: Cotton* (WPA National Research Project, Report No. A-7, Sept. 1938), p. 103.

¹¹Loring K. Macy, Lloyd E. Arnold, and Eugene G. McKibben, *Changes in Technology and Labor Requirements in Crop Production: Corn* (WPA National Research Project, Report No. A-5, June 1938), p. 120.

¹²Loring K. Macy and Others, *Changes in Technology and Labor Requirements in Crop Production: Sugar Beets* (WPA National Research Project, Report No. A-1, Aug. 1937), p. 37.

¹³Materials in the files of the National Research Project for "Studies of Changing Techniques and Employment in Agriculture" support the conclusion that if there has been any post-war decline in the hours of work put in per day on farms in the United States, it has been slight, probably not exceeding $\frac{1}{4}$ hour in the period 1919-36.

FARM-CITY MIGRATION

movement has not been the result of a simple transference of population from the farms to the cities. It has rested upon simultaneous movements: the movement of some persons from the farms and the movement of others to the farms. Consideration of these movements emphasizes further the degree to which industry has turned to agriculture as a source of labor, and at the same time illuminates the nature of the relationship that has developed.

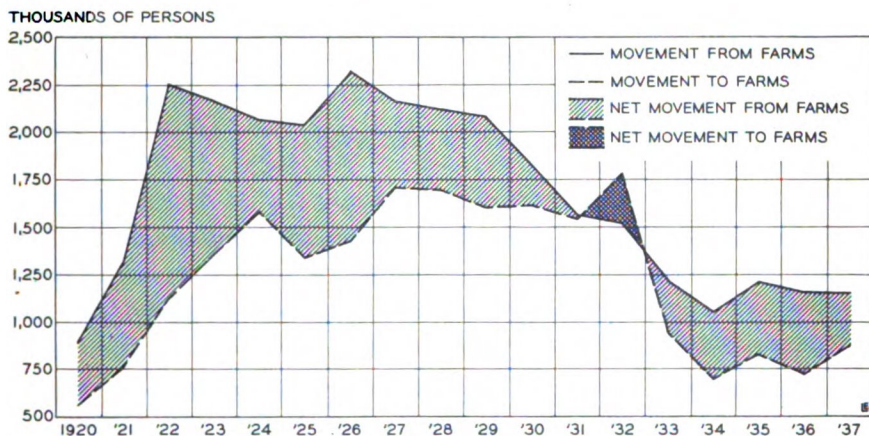
The United States Department of Agriculture has calculated that the gross movement from the land to the cities has, since 1920, varied in annual magnitude from 896,000 persons at its lowest to 2,334,000 at its peak. In other words, in any one year from 1920 to the present, numbers which represented from 3 to 8 percent of the total farm population were moving to the cities. From 1922 to 1929 this migration from the farms exceeded 2 million persons in every year. Even in 1932, the year

Table 1.- MOVEMENTS TO AND FROM FARMS, 1920-37^a

Year	Number of persons arriving at farms from cities, towns, and villages	Number of persons leaving farms for cities, towns, and villages	Net movement from farms to cities, towns, and villages
1920	560,000	896,000	336,000
1921	759,000	1,323,000	564,000
1922	1,115,000	2,252,000	1,137,000
1923	1,355,000	2,162,000	807,000
1924	1,581,000	2,068,000	487,000
1925	1,336,000	2,038,000	702,000
1926	1,427,000	2,334,000	907,000
1927	1,705,000	2,162,000	457,000
1928	1,698,000	2,120,000	422,000
1929	1,604,000	2,081,000	477,000
1930	1,611,000	1,823,000	212,000
1931	1,546,000	1,566,000	20,000
1932	1,777,000	1,511,000	-266,000
1933	944,000	1,225,000	281,000
1934	700,000	1,051,000	351,000
1935	825,000	1,211,000	386,000
1936	719,000	1,166,000	447,000
1937	872,000	1,160,000	288,000

^a Farm Population Estimates, January 1, 1938 (U. S. Dept. Agr., Bur. Agr. Econ., mimeo., June 16, 1938), p. 9.

Figure 2.- MOVEMENTS TO AND FROM FARMS, 1920-37



in which there was a net migration to the farms, the number of persons leaving the farms was over $1\frac{1}{2}$ million. (Table 1 and figure 2.) This is an extraordinary record and quite contrary to the popular conception that farm persons are fixed to the land. Its size alone is an indication of the significance of rural-urban migration and its relation to the problems of the industrial labor market.

The annual movement to the land that was going on all this time was sufficiently large to reduce appreciably the gain to the cities in any one year. From 1920 to the present no year saw fewer than 560,000 persons moving from the cities to the rural areas of America. In none of the years of industrial prosperity did the number of persons leaving the cities fall below a million. In 1926, the year in which 2,334,000 persons are estimated to have left the land, 1,427,000 are estimated to have gone to the land. In that year, in other words, behind every addition, through migration, of one person to city population lies concealed the actual movement of four persons between city and country.

This analysis of the net migration into its opposite components - rural-urban and urban-rural movements - brings out several following provocative points. It is notable that the volume of movement in both directions has for some time been considerable; furthermore, although the general trend has been for a greater movement from farm to city than from city to farm, there have been years in which the gross movement from

the farms declined while the gross movement to the farms remained relatively high, producing in 1932 a reversal of the tendency for the city to gain population at the expense of the land.

PURPOSE OF THE STUDY

This study is concerned with an analysis of the social and economic factors which lie at the base of the tremendous and dual flow between farm and city and with the relationship of these factors to the labor market of industry and to the problems of industrial unemployment and underemployment.

Unquestionably there are subsumed under the impressive totals of movement an infinite complexity of hopes and ambitions. But this subjective diversity is both less susceptible to measurement and less generally significant than the objective circumstances under which the migration occurs. The individual motivations of the persons involved in the movement have been frequently discussed. But the very magnitude of the movement and the fact that persons have not only moved from the farms but have also returned to the land necessitate that primary consideration be given to the objective circumstances under which much of this movement has occurred. Such an approach will not only illuminate the nature of the movement itself and the economic developments of which it is part, but will also help to explain the individual motivations.

What are the circumstances on the land which impel the movement toward the cities? Under what circumstances have the rural-urban migrants found the employment they sought? How adequate an adjustment have they been able to make? What has been the effect upon the industrial labor market? What is the significance of the movement from the cities to the land?

Patently, the persistent tendency to a transfer of persons at the average rate of half a million per year from agriculture to industry is of great importance to the employment needs of industry and to the unemployment hazards of the industrial labor market. A reconsideration of the migration movement and an analysis of the factors involved in it will add to our understanding of the role it plays in the industrial labor market, and of the general problem of industrial employment and unemployment to which the special problem of migration is contributory.

PLAN OF THE STUDY

In the succeeding chapters analysis is attempted of the basic considerations involved in the migration movement and its relation to the industrial labor market, particularly in the period following the World War. Chapter II deals with the circumstances in agriculture from which people have been moving. Material has been gathered for this purpose from studies of the "farm problem" and from studies of population trends. It is here used to indicate the nature of the imperatives behind the flow from the land and the conditioning effect these have upon the role of the migrant in the industrial labor market. The third chapter is concerned with the circumstances in the industrial labor market to which these persons "freed" from the soil turn and the role in industry of such additions to the labor supply. Material gathered for the National Research Project's studies of industrial labor markets and from special studies of particular groups of migrants permits an analysis of the status and significance of the migrant in industry. Chapter IV analyzes the retreat from the industrial labor market which has been a phenomenon accompanying the flow toward the cities, its relation to the findings in the preceding chapter, and its significance to the problem of the industrial labor reserve. The final chapter summarizes the findings of the analyses.

CHAPTER II

THE PRESSURE ON THE FARM POPULATION

A major factor in the migration from rural areas to the cities has been the pressure of spreading economic insecurity, the inability of an increasing proportion of the farm population to wrest a living from the soil or even to maintain their hold thereon. Even in the years of industrial prosperity, 1922-29, agriculture was evidencing acute problem conditions. While industrial America was rapidly expanding, agricultural America had entered upon the stage where vast numbers of its population were in a marginal or submarginal class, often unable to earn even minimum subsistence requirements.

The impact of problem and pressure conditions upon the agricultural population has naturally been selective. It has affected most drastically those on the lower rungs of what is called the "agricultural ladder", the farm laborer, the sharecropper, and the tenant. But those whose hold on the upper rungs of the ladder has been attained most recently or has been least secure have also felt the force of critical conditions. The rise in mortgage indebtedness and the incidence of foreclosure attest the ease with which, in recent years, farmers have been slipping down the agricultural ladder from ownership to tenancy and to wage work.

The depletion and erosion of the soil in some areas due to faulty exploitation, the inability of the small farmer to enlist the mechanical aids and industrial methods which would permit him to compete with the growing industrial farms for a share of the commercial market, the destruction of land resources by such catastrophic events as flood and dust storm, the loss of export markets, the decline in the market for particular crops - all have played their part in swelling the army of persons on the land who, in the years following the war, have found themselves unable to secure a livelihood therefrom.

Various measurements presented by the U. S. Department of Agriculture afford evidence of the pressure conditions that have obtained on the land for a considerable period. The income of the farm family has declined steadily until, for many,

it has fallen below subsistence level. The steady loss of equity in the land and the related rise in tenancy, share-cropping, and labor of a migratory or casual character attest the increasingly unwholesome economic conditions of the farmer. Journalistic pronouncement and legislative enactment have served to underscore the situation. The "farm problem" has become a recognized post-war phenomenon.

The purchasing power of the farmers experienced a sharp rise during the war period, but this was completely wiped out during the early twenties.¹ Throughout the years when industrial America was registering prosperity, farm purchasing power remained not only below the levels experienced during wartime expansion but even below its pre-war levels. With the onset of the world depression it fell even further below these levels and has not yet recovered. From 1926 to 1935 the proportion of the Nation's farmers operating their own farms who received a net income of less than \$1,000 per year, including the market value of all products consumed by the farm family, was persistently higher than 50 percent. At the end of the decade the proportion was 72 percent, having in 1932 reached a high of 96 percent. The proportion receiving a net income of less than \$500 was never less than 30 percent; in 1932 it went as high as 86 percent. The proportion working farms at a loss ranged from a low of 8 percent to a high of 43 percent. (See figure 3.)

The condition of the farm laborer has been even worse. In a recent Nation-wide study of farm laborers an approximate annual average cash income of only \$265 was reported. In one of the counties studies this average was \$127 per year.² A primary factor in the unemployment and underemployment that this reflects has been the tremendous and growing competition for jobs that has attended the developing industrialization of agriculture. In January 1933 there were an estimated 236 men available for every 100 jobs. Though this was the peak proportion reported, the condition has been chronic for many years.³

The increase in mortgage indebtedness on the land and the constant recurrence of forced sales because of tax delinquency

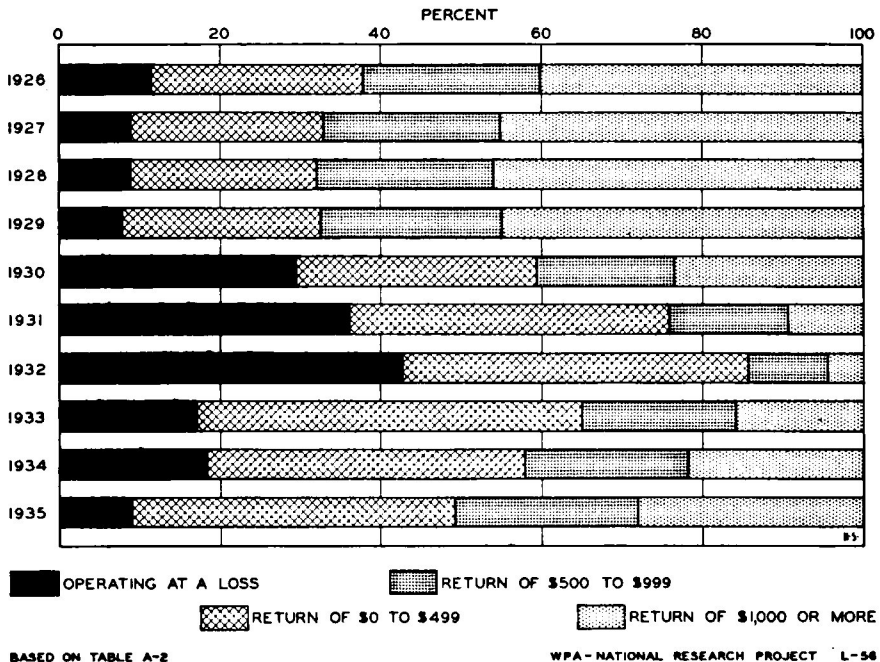
¹L. H. Bean, *Income Parity for Agriculture* (U. S. Dept. Agr., Agricultural Adjustment Administration, mimeo., Mar. 1936), p. 6c.

²Statement of Paul S. Taylor, University of California, Before the Special Senate Committee to Investigate Unemployment and Relief (U. S. Dept. Agr., mimeo., March 14, 1938), p. 1.

³*Ibid.*

FARM-CITY MIGRATION

Figure 3.- DISTRIBUTION OF FARM OWNER-OPERATORS BY AMOUNT OF NET RETURN, 1926-35



or inability to keep up mortgage payments reflect further the inability of a growing number of persons to secure an adequate livelihood from the soil and the increasingly precarious position of large numbers of farmers. Of the 3,568,394 owner-operated farms in the Nation in 1930, only 51.7 percent were reported mortgage-free.⁴ The proportion reported mortgaged that year was 42.0 percent, a percentage higher than that of any previous census year.⁵ It had mounted from 27.8 percent in 1890 to 37.2 percent in 1920, had declined slightly in 1925 to 36.1 percent, and had risen again to 42 percent in 1930 (table A-3). Tax delinquency also mounted.

Statistics on the proportion of farms which changed hands through forced sales either because of foreclosures or tax delinquency (table 2) indicate the most extreme form of pressure upon farm owner-operators - their absolute separation from control of a basic resource, the land.

⁴Fifteenth Census of the United States: 1930, "Agriculture" (U. S. Dept. Com., Bur. Census, 1932), IV, 454, 459.

⁵No report on mortgage status was made for 6.3 percent of the owner-operated farms. (*Ibid.*)

Table 2.- PROPORTION OF FARMS CHANGING OWNERSHIP BY FORCED SALES AND RELATED DEFAULTS, 1926-35^a

Year	Number per thousand of all farms	Year	Number per thousand of all farms
1926	21.6	1931	26.1
1927	23.3	1932	41.7
1928	22.8	1933	54.1
1929	19.5	1934	39.1
1930	20.8	1935	28.3

^aU. S. Department of Agriculture, *The Farm Real Estate Situation*, Circulars 150 (Nov. 1930), p. 41; 309 (Dec. 1933), p. 42; and 417 (Oct. 1936), p. 26. Figures include farms sold for delinquent taxes, foreclosure of mortgages, bankruptcy, and sales and transfers to avoid foreclosure.

In these figures interest attaches not so much to the changing number of farms lost to their owners through forced sales as to the fact that in every year of the decade 19 or more farm families out of every thousand thus lost control of their basic resource and that in 1933 this condition affected as many as 54 families out of every thousand.

Thus farm operators were steadily losing equity in the land through involuntary sale and the progressive growth of mortgage indebtedness.⁶ Conversely, tenancy and the conditions of insecurity and instability related to the tenant system were rising sharply (see figure 4 and table A-4). According to Henry A. Wallace, Secretary of Agriculture:

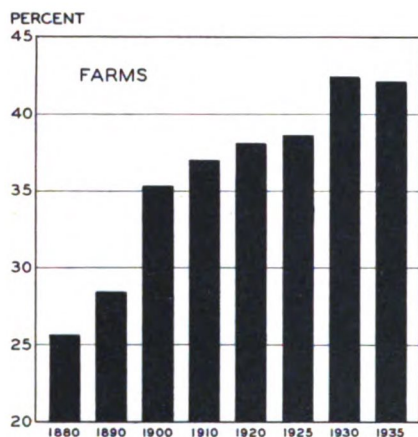
During the period from 1880 to 1935 farm tenancy increased at the rate of 33,465 farms per year. . . . The above increase in tenancy, however, while representing the long-term trend, is conservative. In more recent years the trend toward tenancy has increased. If we take the 10 years from 1925 to 1935 the rate of increase has been 40,325 annually. During the past 5 years, 1930-35, the increase has been at the rate of 40,158.⁷

The tenant system, either as such or as now existent in the United States, is almost universally in disrepute; its growth has meant an extension of conditions on the land which have

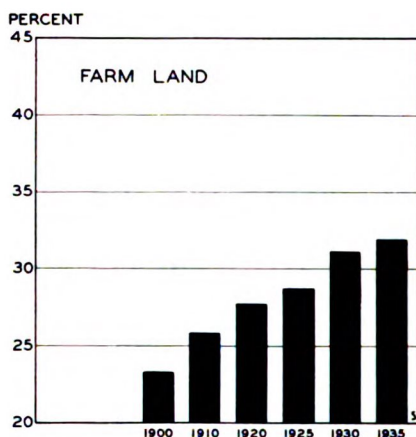
⁶According to H. A. Turner, in *A Graphic Summary of Farm Tenure* (U. S. Dept. Agr., Misc. Pub. No. 261, Dec. 1936), p. 1: "The equities of the farm operators of the Nation constituted 54 percent of the value of all farm real estate in 1900, 50 percent in 1910, 48 percent in 1920, 42 percent in 1930, and have presumably decreased even further since 1930."

⁷Report to the opening session of the President's Committee on Farm Tenancy, Washington, D. C., December 16, 1936.

Figure 4.- PROPORTION OF ALL FARMS AND FARM LAND OPERATED BY TENANTS, 1880-1935



BASED ON CENSUS OF AGRICULTURE: 1935, III, P.107



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been variously stigmatized as "unwholesome", "vicious", and the like. It is in general characterized by both low income and extreme instability of tenure. As Secretary of Agriculture Wallace has pointed out, it "often goes hand in hand with soil erosion, with run-down buildings, and unkept homesteads."⁸ In the southern cotton belt where it is most prevalent it is characterized by the worst conditions. In a study of tenancy in the South made by the Works Progress Administration the net annual income for tenants, wage workers, and sharecroppers in this area was found to be \$73, or about \$1.40 per week per person. This included not only cash income but also subsistence advances and products grown for home consumption. Furthermore, it was found that in some areas the annual income of croppers was as low as \$38 per capita, or less than \$0.11 per day.⁹

Dover P. Trent of the Farm Security Administration has summarized some of the implications of our present tenure situation as follows: ". . . only $\frac{1}{3}$ of the farm population of the United States is secure in ownership of their farms, about $\frac{1}{4}$ own farms which are encumbered by debt, nearly $\frac{1}{2}$ are landless and over 3,000,000 of these landless people are not only landless but are devoid of any property except meager belongings

⁸Henry A. Wallace, *Farm tenancy* (Address over the Columbia Broadcasting System; U. S. Dept. Agr., mimeo. press release, Jan. 22, 1937), p. 3.

⁹T. J. Woolter, Jr., *Landlord and tenant on the Cotton Plantation* (Works Progress Administration, Division of Social Research, Research Monograph V, 1936), p. 83.

which they can readily move from farm to farm."¹⁰ Furthermore, a comparison of land values indicates that owner-operated farms are characteristically located on less productive land and that "tenants and croppers are to a disproportionate extent located where the best farming lands are."¹¹

EMIGRATION - THE FLIGHT FROM INSECURITY ON THE LAND

The existence and spread of conditions such as these has been a primary factor in the great migration from the land that has been occurring. The inability to get from the soil an adequate livelihood, the loss of control over the land, the consolidation of small farms into large units, unemployment and underemployment - these have been the driving forces of the great bulk of the movement toward the city. This is manifest when account is taken of the nature of the areas that have been centers of heavy emigration, the historical circumstances under which migration from certain areas has been accelerated or retarded, and, where known, the characteristic situations of the individuals who leave the land.

Regional Differences in Migration and Pressure Conditions

Dr. O. E. Baker, in an analysis of "Rural-Urban Migration and the National Welfare", has compared the various States with respect to the incidence of migration and differing rates of natural increase, the level of technical progress in farming, and the degree of devastation by pests. Dr. Baker found that the States from which the heaviest migration had occurred were those in which the natural increase, and particularly the birth rate, was highest, the soil fertility lowest, the technical equipment least advanced, and the pest problem most acute.¹²

This conclusion is further supported by the findings of Carter Goodrich and others in *Migration and Economic Opportunity*. A study made of 51 agricultural counties in which the relief load in 1933-34 represented 30 to 36 percent of the county population, a proportion relatively high and indicating areas of great distress, showed that all but 7 of these were areas

¹⁰Dover P. Trent, *The Nation's Soil and Human Resources* (U. S. Dept. Agr., Farm Security Administration, mimeo.), p. 7.

¹¹Turner, *op. cit.*, p. 40.

¹²O. E. Baker, "Rural-Urban Migration and the National Welfare," *Annals of the Association of American Geographers*, Vol. XXIII, No. 2 (June 1933), p. 76.

which were sending forth their population in the twenties, the period of industrial prosperity. According to Goodrich and his associates, "nothing in the analysis is more striking than the degree to which the migration of the twenties was drawing population away from . . . [agricultural] areas of chronic distress" ¹³

Kenneth H. Parsons, of the Land Policy Section of the Agricultural Adjustment Administration, reports similar conclusions:

. . . the poorer subsistence farming areas, many of which are well-known problem areas, lost larger proportions of their population than good land areas during the period of industrial activity from 1922 to 1929. . . . ¹⁴

The recent report of the National Resources Committee on *The Problems of a Changing Population* also points to "evidence of large population movements during the twenties away from areas of economic insecurity and low levels of living." The tendency was for persons "to leave areas of meager opportunity in numbers large enough to offset the rapid natural increase." ¹⁵

Dr. Goodrich, in a speech to the Population Association Conference in Washington in May 1935, reported as follows on a study made in conjunction with the U. S. Department of Agriculture in which the agricultural counties of a number of States were divided on a quartile basis according to the index of farm income per rural farm inhabitant in 1929 and their population changes compared:

The general nature of the results may be suggested by what appeared in the State of Michigan. If you looked at the period from 1922 to 1929, the worst quarter of agricultural counties lost population at an exceedingly rapid rate, so that the curve from 1922 to 1929 sloped downward very rapidly. The next quartile of agricultural counties went down too, but not at quite so steep a pitch, and then the second best and the best arranged themselves neatly under these two curves, each losing less than the one before. ¹⁶

¹³Carter Goodrich and Others, *Migration and Economic Opportunity* (Philadelphia, Pa.: University of Pennsylvania Press, 1936), pp. 507-8.

¹⁴*Supplementary Report of the Land Planning Committee to the National Resources Board*, Part VI, "Maladjustments in Land Use in the United States" (National Resources Board, 1935), p. 63.

¹⁵*The Problems of a Changing Population* (Report of the Committee on Population Problems to the National Resources Committee, May 1938), p. 106.

¹⁶*Population Redistribution* (Washington, D. C.: Population Association of America, Round Table Record, May 3, 1935), p. 3.

The Pressure Behind the Movement From the South

The degree to which the South has accounted for migration in the past two decades affords particularly striking evidence of the nature of the imperatives behind the quitting of the land. The region generically known as the South contains two of the great problem areas of rural America today: the Southern Appalachian Belt and the Eastern Cotton Area. In these an acute erosion problem, crop failures, speculative expansion, absentee ownership and tenancy, depressed market prices, and a complex of related factors have produced a condition of extreme economic pressure.

Erosion is probably one of the most important single factors in this problem situation. Sixty-one percent of the Nation's eroded land¹⁷ and 63 percent of the farms that have been recommended for retirement from arable farming are located in this region.¹⁸

The high tenancy rate with the insecurity and instability incident upon this system is another important factor in the situation which may be contributory to a future erosion problem in addition to being today a problem in itself. Over 50 percent of the farms in the region are tenant-operated. In some regions, notably the Delta, the rate is as high as 90 percent.¹⁹ Reference to the income and living condition of the southern tenant has already been made.

In general, the factors of land erosion and tenancy tend to complement each other. As has already been indicated, tenancy tends to be established on the best land of a region and owner operation on the poorer lands. Thus there tends to be either the insecurity and instability of tenancy in the rich lands of the Mississippi Valley or a low level of subsistence farming in the Appalachian regions. In either case the result is pressure upon the population.

Mortgage indebtedness - another index of adverse economic conditions - also has been increasing faster in the South than in any other region of the country (table A-3). To it may be added many measures of the standard of income and living

¹⁷ Howard W. Odum, *Southern Regions of the United States* (Chapel Hill, N. C.: The University of North Carolina Press, 1936), p. 39.

¹⁸ *Supplementary Report of the Land Planning Committee to the National Resources Board*, part VI, p. 14.

¹⁹ *Ibid.*, p. 61.

conditions prevalent in the area. In the southern Appalachian regions are located, for example, 52 of the 64 counties in the country in which the agricultural income per rural farm inhabitant was less than \$100 in 1929. Furthermore, in a map of "Agricultural Income and Planes of Living", Dr. Goodrich points out that almost universally the counties of the Eastern Cotton Area appear among the least favored.²⁰

Howard W. Odum has summarized the deficiencies of the southern agricultural regions in the following words:

. . . . low income, high tenant rates, low ratio of income from livestock, low ratios of domestic animals, high fertilizer consumption, deficiencies in farm tools and implements, in farm housing and conveniences, low land and stock values waste from neglect and lack of cooperative effort.²¹

Imposed upon this situation of extreme insecurity and instability is a record of perhaps the highest natural increase to be found in the United States. In 1930 the number of children under 5 years of age per thousand women 20 to 45 years of age was 488 for the United States as a whole. In many of the eastern counties of Kentucky, however, the ratio was 1,000 or higher per thousand women. Only 3 of the 205 counties in the southern Appalachians had ratios which were lower than the national average.²² In the years from 1930 to 1934 the South alone, where only half of the Nation's farm families are located, accounted for two-thirds of the natural increase of farm population. According to the U. S. Department of Agriculture, "it is evident that the citizens of the future are coming in increasing proportion from the farms of the South."²³

Yet it is also evident from the foregoing that they have been coming, "in increasing proportion", into a region where the hope of adequate livelihood on the land was small and declining. Under this combination of circumstances - dwindling opportunity combining with a high rate of increase to produce economic pressure - the South has become a source of a great proportion of the Nation's rural-urban migrants. Of the total net movement from the land that occurred during the decade

²⁰Goodrich and Others, *op. cit.*, p. 14 and plate 1.

²¹Odum, *op. cit.*, p. 425.

²²Goodrich and Others, *op. cit.*, p. 62.

²³*A Graphic Summary of Farm Labor and Population* (U. S. Dept. Agr., Misc. Pub. No. 265, Nov. 1937), p. 33.

of heaviest cityward migration (1920-29), 60 percent was from the South.²⁴

From another point of view also the South demonstrates the relationship between economic pressure and migration. As the region with the fewest advantages in American agriculture, it not only accounts for the greatest proportion of the total rural-urban migrants, but it has also sent forth the greatest proportion of its farming population. According to U. S. Department of Agriculture figures, the migration from the land during the twenties involved a net loss to American agriculture as a whole equal to 20 percent of its 1920 population.²⁵ The loss to the southern Appalachian region equaled over 25 percent of its 1920 population.²⁶ South Carolina sent forth 31 percent; Georgia, 30 percent; and Virginia, Maryland, West Virginia, Kentucky, and Tennessee in excess of 20 percent.²⁷

Economic Insecurity in Other Regions of Heavy Emigration

The characteristics of two other regions of heavy emigration afford further indication of the degree to which the movement from the land has been impelled by distress or economic insecurity. They are the Great Plains and arid sections of the West and the cut-over areas in the northern Lake States.

In the former area, New Mexico, Idaho, Utah, and Montana each sent out in excess of 20 percent of their 1920 population in the decade 1920 to 1930.²⁸ In Utah the net emigration amounted to 34 percent of the 1920 population.²⁹ Some of the other States, although they sent out less than 20 percent on a State basis, were sending out population at a very high rate from their poorer areas to their better areas as well as out of the State, although this movement is considerably obscured by the over-all State figures. On the plane-of-living map (previously referred to) constructed by Dr. Goodrich and his

²⁴ *Supplementary Report of the Land Planning Committee to the National Resources Board, Part I, "General Conditions and Tendencies Influencing the Nation's Land Requirements"* (National Resources Board, 1938), p. 1.

²⁵ *A Graphic Summary of Farm Labor and Population*, p. 30.

²⁶ From material in the files of the National Research Project, "Studies of Changing Techniques and Employment in Agriculture" section.

²⁷ O. E. Baker, *Population and Occupational Shifts* (Address before the American Country Life Assoc. and the Land Grant College Assoc.; U. S. Dept. Agr., Bur. Agr. Econ., mimeo., Nov. 19, 1934), p. 3.

²⁸ *A Graphic Summary of Farm Labor and Population*, p. 30.

²⁹ *Supplementary Report of the Land Planning Committee to the National Resources Board, part I, pp. 1-2.*

associates, this entire Great Plains and Rocky Mountain region appears in a relatively low position. In Utah, according to the National Resources Board, "tax delinquency runs to 40 or 50 percent, and in some localities it approaches 100 percent." Furthermore, quoting the same source:

In many places the land is worth no more than \$3 to \$5 per acre. . . . In some places the rural inhabitants have been literally starved out and a large part of the land has been sold for taxes.³⁰

Again, as in the South, not all of the movement has been from lands in themselves poor. The consolidation of small holdings into large commercial farms, particularly in the wheat section of this region, has produced directly or indirectly a form of pressure distinct from that occasioned by poor natural opportunities. The farmer on a small holding, unable to compete with the production methods of the commercial farm, as well as the one whose farm has been consolidated into a larger unit, may be subjected to a pressure which results in emigration.

The cut-over region, another area of heavy emigration as well as one to which persons were later to flee in the depression years (see chapter IV), has long been a region of great poverty coupled with a high rate of natural increase. Many of the farmers support a debt far greater than their resources permit, the soil is poor, and there is a short growing season that accentuates the problems of the region. As a result there has been a constant process of farm abandonment as persons left for areas of better economic opportunity. In one county in the Wisconsin cut-over, over 400 farms, or 17.6 percent of all in the county, were abandoned in the one year 1926.³¹ This is in addition to a high rate of turn-over as those fleeing unemployment in the cities took the place of those in flight from adverse conditions on the land.

THE DROUGHT REFUGEES

The drought refugees offer a particularly striking illustration of the economic necessity which has been basic to the migration from the land. Since 1929, throughout the period

³⁰ *Supplementary Report of the Land Planning Committee to the National Resources Board*, part VI, p. 40.

³¹ W. A. Hartman and J. D. Black, *Economic Aspects of Land Settlement in the Cut-Over Region of the Great Lake States* (U. S. Dept. Agr., Cir. No. 180, Apr. 1931), p. 68.

of general depression, droughts have forced more than 200,000 persons to migrate from the susceptible areas of the Great Plains.³² This movement has been accelerated since 1935, as the constant recurrence of drought year after year had made the conditions in the region more hopeless. During the 12 months ending June 15, 1936, 56,225 persons "in need of manual employment" entered the single State of California by motor vehicle from the 19 drought States.³³ They, and the thousands of others who were forced, in the drought years 1930, 1931, 1933, 1934, and 1936, to leave their land, were fleeing conditions of economic pressure which presented themselves in the form of sudden catastrophe. But it was the same pressure situation in less dramatic form which forced people off the land in the South, in the cut-over area, and in the other regions which have been turning population over to the cities. Dr. O. E. Baker, in his study of "Rural-Urban Migration and the National Welfare", expressed the general conclusion to which the evidence leads us as follows: "In general, poverty seems to be associated with heavy migration from the farms."³⁴

WHO ARE THE FARM-CITY MIGRANTS?

One of the most important characteristics of the migrants has already been indicated in the analysis of the pressure factors present in the regions of heavy emigration. In large part the migrants are persons in desperate need of employment who are turning to industry to seek it or are leaving marginal or sub-marginal situations on the land in the hope of finding better economic adjustment in the industrial labor market. Studies made in a few counties of Virginia, North Carolina, New York, Ohio, Mississippi, and Washington provide further evidence of this characteristic. In general they show that it is the sons of tenants who tend to emigrate rather than the sons of owners; that those in poor circumstances rather than those in good circumstances comprise the emigrants. Similarly, Zimmerman, in a study of 694 Minnesota farm families, drew the tentative conclusion that it was the children of the less

³²U. S. Congress, Senate, *Migration of Workers*, Preliminary Report of the Secretary of Labor Pursuant to S. Res. 298 (74th Cong.), 75th Cong., 1st sess., mimeo., 1938, I, 60.

³³Edward J. Rowell, "Drought Refugee and Labor Migration to California in 1936," *Monthly Labor Review*, Vol. 43, No. 6 (Dec. 1936), pp. 1357-8.

³⁴Baker, "Rural-Urban Migration and the National Welfare," p. 76.

successful farm families who migrated to the industrial cities in search of wage work.³⁵

As will be seen later, this characteristic of the migrants as pressure-driven persons is an important factor in determining their role in the industrial labor market. Here, however, we must note other relevant material on the nature of the migrating force, material relating primarily to their employability. In terms of age and sex, who are the persons who migrate?

It is evident that under certain circumstances there will be little selectivity of either age or sex in the migration movement. A local catastrophe will obviously tend to move out of an area all the persons who had been located there. Similarly, under other circumstances when economic pressure leads to the abandonment of whole farms, or to the absorption of a number of farming units into one larger, more efficient unit, it will be the whole family that tends to emigrate. That the migrating population has included whole families is evidenced by U. S. Department of Agriculture figures on the number of farms operated in the United States.

During the twenties the number of farms decreased markedly in the southeastern region of the United States, particularly in South Carolina, Georgia, and the eastern dairy region. This is in part to be accounted for by consolidation and in part by farm abandonment, as land no longer operable went out of use. Other areas showed an increase in the number of farms: the Mississippi Delta region, as land was reclaimed by draining; the western cotton region, as cotton, moving away from the East and the boll weevil, extended its activity in this area; some of the central cotton belt as the boll weevil came under control; and scattered counties of the West and Northwest. Throughout the Nation as a whole the decrease in the number of farms exceeded the increase by 160,000.³⁶ Thus, part of the migration from the land must have been of whole families.

But the extent of emigration, net or gross, was far greater than can reasonably be accounted for by this reduction in the number of farms. In addition to the whole families, the migrating population included a large number of individuals who

³⁵Carle C. Zimmerman, "The Migration to Towns and Cities, Part II," *The American Journal of Sociology*, Vol. XXIII, No. 1 (July 1927), pp. 105-9.

³⁶*Graphic Summary of the Number, Size, and Type of Farms, and Value of Products* (U. S. Dept. Agr., Misc. Pub. No. 268, Oct. 1937), p. 8.

represented surplus labor on farms which the family continued to operate. It is these younger persons who constitute the great bulk of the emigrating population.

Since no direct study of the migrating population has been made, it is difficult to determine precisely the age distribution of the migrants. However, the National Resources Committee has calculated that about 40 percent of the farm boys and girls who were, in 1920, 10 to 20 years old left the farms for the cities in the ensuing 10 years.³⁷ There are, in addition, figures on the effect of net migration; these show what age groups have been most affected by the net migrations and therefore give a fairly clear picture of the selective part played by age in migration. Table 3 presents these data, indicating the effect of migration between 1920 and 1930 on the 1920 age composition of the population. Total migration from farms was less during the depression years, and this reduction must have been most disturbing to the younger persons on the farms. This question will be discussed further in chapter V.

Table 3.- ESTIMATED NET MIGRATION, 1920-30,
AS PERCENT OF THE 1920 URBAN AND RURAL
POPULATIONS, BY AGE GROUPS^a

Age in 1920	Age in 1930	Urban		Rural, nonfarm		Rural, farm	
		Male	Female	Male	Female	Male	Female
0-4	10-14	6	8	-3	-3	-7	-10
5-9	15-19	10	18	-7	-5	-10	-21
10-14	20-24	26	32	1	-1	-33	-43
15-19	25-29	30	25	10	5	-43	-43
20-24	30-34	14	10	9	5	-30	-24
25-29	35-39	6	6	7	1	-17	-13
30-34	40-44	5	6	3	0	-11	-12
35-39	45-49	4	6	1	1	-8	-13
40-44	50-54	2	6	3	4	-5	-14
45-49	55-59	1	5	6	9	-6	-16
50-54	60-64	0	5	10	12	-6	-18
55-59	65-69	0	6	13	13	-9	-21
60-64	70-74	0	7	18	12	-12	-22
65-69	75-79	4	9	18	7	-17	-42

^aHarold F. Dorn and Frank Lorimer, "Migration, Reproduction, and Population Adjustment," *The Annals of the American Academy of Political and Social Science*, Vol. 188 (Nov. 1936), p. 287.

Negative figures indicate net movement away.

³⁷*The Problems of a Changing Population*, p. 110.

Most notable in this picture are the strikingly heavy losses suffered by the farming population under 25. Of the 8 million net migrants in this decade, Dr. Goodrich points out, almost 75 percent were between 5 and 25 years old in 1920 and 50 percent were between 10 and 20 years of age; only 10 percent were 45 or older.³⁸

As to the sex of the migrants, various studies indicate that younger women tend to leave the farms more than do younger men.³⁹ Dr. C. Horace Hamilton has stated that "older males and females leave home at approximately the same rates but that younger females leave home at a higher rate than do younger males." Similarly, the National Resources Committee reports that "girls begin to migrate to the cities several years earlier than boys." Only in the age group 20-30 do males leave the farms in larger numbers than females.⁴⁰

In summary, then, several characteristics of the migration movement may be noted before attention is turned to the conditions in the industrial labor market to which the rural-urban migrant comes. The farm-city migrants were predominantly persons under economic pressure. They were leaving areas where land conditions or other factors combined to make it impossible for them to secure an adequate livelihood. The bulk of the migrating population was young; it consisted of a slightly higher proportion of females than of males.

³⁸Goodrich and Others, *op. cit.*, p. 690.

³⁹C. Horace Hamilton, "The Annual Rate of Departure of Rural Youths From Their Parental Homes," *Rural Sociology*, Vol. I, No. 2 (June 1936), p. 169.

⁴⁰*The Problems of a Changing Population*, p. 109.

CHAPTER III

THE FORMER AGRICULTURAL WORKER IN THE INDUSTRIAL LABOR MARKET

In a recent speech Louis H. Bean pointed to the volume of industrial production and the purchasing power of urban consumers as matters of moment to the farmer. The fluctuations in the ability of the urban inhabitant and of industry to purchase farm products were characterized as "the other half of the farm problem."¹ In an additional sense, the trends and characteristics of industrial employment have become the proper concern of a great proportion of the Nation's farmers. The average number of persons "released" from agriculture who turned to the cities each year during the twenties was almost 2 million. In the years 1930 to 1936 the number of persons was still over $1\frac{1}{3}$ million annually. A large proportion of these persons were employable. More, they were mainly persons in urgent need of employment.

Though data tracing directly the farm-city migrants through their transition from a potential reserve to an immediately available supply of labor are scant and though information on their urban employment experience is limited, it is possible to delineate their characteristic role and to gain some understanding of their place in the industrial labor market. There was a tremendous body of persons annually seeking employment in industry's labor market. They came into the cities even in years when there was available a large supply of industrial unemployed who were seeking jobs. Under what circumstances did they find the employment they needed? What adjustments were they able to make? What can be said of their influence on conditions in the industrial labor market?

The total demand for workers is not limited by the current volume of employment opportunities. In an industrial economy the availability of a supply of workers greater than the number actually employed is constantly desirable or necessary. Such a surplus labor force may be needed to meet seasonal

¹Louis H. Bean, *The Other Half of the Farm Problem* (Address at meeting of the Illinois Agricultural Association, Springfield, Ill., Jan. 28, 1938).

increases in employment or anticipated peak demands or to permit replacements of an existing force in whole or in part. In general, replacements can occur in appreciable numbers only when the technique of production permits the use of untrained workers, but the stimulus to replace the working force or to have replacements available may stem from any number of factors. It has been pointed out that although the collection and maintenance of a reserve of labor is in part an unconscious process, in many cases "there can be no doubt that more or less deliberate measures have to be adopted. . . . Work which might be done always by the same men is given out in rotation so as to have men always in close attendance for emergencies."²

Thus the new worker can hope to find a place in situations where the working force is being expanded or where relocation of industry necessitates the building of a new force and in situations where an industry or enterprise has embarked upon a policy of replacing existing forces with recruits from the reserve supply. In all phases of this process the rural-urban migrants have unquestionably played a prominent role. By the very nature of the circumstances under which they have been "released" from agriculture, they are, along with new entrants into the labor market and the urban unemployed, available as an extension of the industrial labor supply and labor reserve. Whether, under such circumstances, the migrated worker is the one to get a job depends upon such factors as his availability in a given locality, his qualifications, or the hiring policies that currently may make him more desirable than another member of the labor reserve.

There are a number of illustrations of industrial situations in which considerable proportions of rural-urban migrants have found employment.

EXPANSION OF INDUSTRIAL DEMAND FOR LABOR

One of the most marked increases in labor demand since the decline of immigration to this country has occurred in the automobile industry. Between 1919 and 1929 the labor force

²W. H. Beveridge, *Unemployment, a Problem of Industry* (London: Longmans, Green and Co., 1930), p. 85.

utilized by this industry increased by over 100,000 persons.³ In addition, the industry tended to be concentrated in Michigan.⁴ The industry turned, as a matter of policy, to the rural regions of America for its supply of labor. Many of the companies sent out agents or advertised in the rural newspapers of such distant regions as Georgia, Alabama, Mississippi, and West Virginia, as well as through broad sections of the Middle West. Even after a labor force had been thus recruited, advertising in some regions continued.⁵ The development of the industry thus brought with it a large influx of migrants from the poorer rural areas of other States as well as from Michigan. Thornthwaite finds that during the decade 1920-30 over 200,000 native whites of native parentage migrated to Michigan.⁶ Goodrich reports that over 175,000 males and as many females flocked to Detroit in this same period.⁷ This migration brought to the cities during the twenties almost half of the Michigan rural population which had been, in 1920, 10 to 20 years old.⁸

Although there is no quantitative measure of the degree to which the southern laborer, so predominant in the rural-urban migration movement, has gravitated toward this region, he has undoubtedly played a large part in the building of the labor supply of the expanding auto industry. According to one article, the rising demand for laborers during the twenties brought many of them to the automobile centers. Mountaineers, plantation workers, and plow hands were persuaded to come to Detroit.⁹ The spectacular increase in the Negro population of Detroit also reflects this influx of southern workers. In a survey conducted by the Mayor's Interracial Committee of Detroit in the middle twenties, it was found that of 986 Negro

³ Tracy E. Thompson, *Location of Manufactures, 1899-1929* (U. S. Dept. Com., Bur. Census, 1933), p. 18.

⁴ *Census of Manufactures: 1935* (U. S. Dept. Com., Bur. Census, 1938), pp. 1149-54.

⁵ See *Hearings Before the Henderson Board in Detroit*, "Preliminary Report on Regularization of Employment and Improvement of Labor Conditions in the Automobile Industry" (National Recovery Administration, Research and Planning Division, Dec. 22, 1934); Robert W. Dunn, *Labor and Automobiles* (New York: International Publishers, 1929), p. 110; Louis F. Budenz, "The Gang System Comes to Nash's," *Labor Age*, Vol. XVIII, No. 4 (Apr. 1929), pp. 6-7; Beulah Amidon, "Toledo: A City the Auto Ran Over," *The Survey*, Vol. LXIII, No. 11 (Mar. 1, 1930), p. 656 ff.

⁶ C. Warren Thornthwaite, *Internal Migration in the United States* (Philadelphia, Pa.: University of Pennsylvania Press, 1934), p. 20.

⁷ Carter Goodrich and Others, *Migration and Economic Opportunity* (Philadelphia, Pa.: University of Pennsylvania Press, 1936), p. 691.

⁸ Thornthwaite, *op. cit.*, p. 33.

⁹ "Hard Times Hit Detroit Auto Workers," *Labor Age*, Vol. XX, No. 3 (Mar. 1931), p. 5.

families, about half came from Georgia, Alabama, and Tennessee alone. Others came from South Carolina, Mississippi, Kentucky, and Arkansas.¹⁰

With the onset of the depression and the contraction in the labor demand of the automobile industry, the migration of ex-farmers into the market of Detroit declined. However, there is evidence that even during the depression period the industry continued to draw to some extent upon the agricultural regions of the country. A study of workers on relief in Michigan in March 1935 (see table 4) found that of those who had obtained a job in the automobile industry after 1930, from 5 to 9 percent had come from agriculture.

Table 4.- AGRICULTURE AS SOURCE OF NEW AUTOMOBILE WORKERS IN THE DEPRESSION^a

Year	Total persons whose first job in auto industry after April 1, 1930, was obtained in specified years	Persons in agriculture between April 1, 1930, and attachment to automobile industry ^b	
		Number	Percent of total persons
Auto-body manufacture			
1932	2,659	123	4.6
1933	5,091	313	6.1
1934	11,874	1,111	9.3
Auto-parts manufacture			
1932	632	48	7.6
1933	1,544	98	6.3
1934	3,313	326	9.8

^a Adapted from manuscript, entitled History of Seventy-Five Thousand Automobile Workers in Michigan (National Recovery Administration, Division of Review), based on schedules from Region I of the Michigan Census of Population and Unemployment. The census covered 197,000 employable persons on relief in Michigan in March 1935; it was conducted by the State Emergency Welfare Relief Commission of Michigan with the assistance and cooperation of the State Emergency Relief Administration of Michigan, the Federal Emergency Relief Administration, and the Division of Social Research of the Works Progress Administration. The table above includes all male and female workers employed for 1 month or more in the automobile industry during the period April 1, 1930, to December 31, 1934. "In all cases the occupation and location previous to the first auto-body or parts industry employment was chosen to be as representative as possible. If the auto-body or parts occupation was preceded by a short period of unemployment or casual labor, the occupation previous to this short period was chosen, particularly if this previous occupation was located in a state outside of Michigan."

^b Includes foreign agriculture.

¹⁰ *The Negro in Detroit* (Detroit Bureau of Governmental Research, 1926), p. 14.

It is notable that although in March 1935, according to this study, there were in Michigan some 75,000 former automobile workers unemployed and on relief, the increase in production that accompanied recovery brought with it a marked increase in the importation of southern labor. Writing in *The Nation* at this time, Louis Adamic reported that for months the companies had been sending labor agents into Kentucky, Tennessee, Louisiana, and Alabama to recruit workers.¹¹

Another example of an industry which has, in its period of expansion, tended to draw upon surplus agricultural labor is afforded by the chemical-products enterprises which have increased in number so markedly since the World War. Here information on the source of the labor supply is less direct than in the case of the automobile industry. However, the areas in which these industries tend to locate are revealing. With but two exceptions, all the large plants in the country are located outside the great congested industrial regions. A great part of them are in the South. Of the 20 representative chemical industries of Nation-wide scope, the South includes 33.7 percent of the number of establishments, 29.3 percent of the number of wage workers, and 22.2 percent of the amount of wages. These industries produced almost 26 percent of the value of their production in the South. (This does not include Louisiana's sugar-refining and ethyl-alcohol enterprises.)¹²

The rayon industry, which has enjoyed the most marked expansion of all the chemical industries, is largely concentrated in the southern and mid-Atlantic States, particularly in and around the States where agricultural conditions have been worst and farm-city migration greatest.

Most of the American rayon is produced in the Southern Appalachians, the Allegheny and Cumberland Plateaus and the Piedmont. . . . Men and women left their hillside farms, and came out of their mountain valleys to work in the rayon mills.¹³

These expanding industries have thus tended to locate in regions where they have been able to tap readily the supply of surplus agricultural labor. Around them have grown up the mill

¹¹ "The Hill-Billies Come to Detroit," *The Nation*, Vol. CXL, No. 3632 (Feb. 13, 1935), p. 177.

¹² Lauren B. Hitchcock, "Chemical Resources and Industries of the South," *The Annals of the American Academy of Political and Social Science*, Vol. 153 (Jan. 1931), pp. 76-83.

¹³ Ben F. Lemert, "The Rayon Industry in the United States," *The Journal of Geography*, Vol. XXXII, No. 2 (Feb. 1933), pp. 52-3.

towns of the South, fed by the dislocated southern farm workers who turned to them when the land proved no longer able to support them.

Tobacco manufacturing has been another industry whose growth has contributed to the industrialization of many sections of the South. By 1927 tobacco manufacturing ranked fourteenth among American manufacturing industries with respect to value of product and number of wage earners employed. It was third among the industries of the South, where about 35 percent of the Nation's tobacco workers were employed. The factories drew much of their labor from the ex-farmers and their families by tapping the poor farming regions near the centers where they were located.¹⁴

According to the U. S. Bureau of the Census, there were 10 industries which showed a marked increase in the number of jobs available during the years 1919 to 1929, despite a decrease in the over-all number of manufacturing jobs in this period. The greatest increases in these industries occurred almost uniformly in the regions associated predominantly with agriculture.¹⁵

THE RELOCATION OF INDUSTRY

In a number of instances a demand was created for the migrant-constituted surplus by the relocation of industry. Where such relocation has occurred it has been largely in such a direction as to bring the industry closer to great fountains of hitherto agricultural population; the industry, whether or not its relocation was dictated by raw material, market, or labor factors, has in such circumstances drawn upon the farm population in the places to which it has gone.

Probably the best known example of this situation is the shift of the cotton-textile industry from the northeastern sections of the country. Leaving behind them, particularly in New England, many towns populated with an unemployed group that had previously been drawn from the agricultural areas of the region and from the immigrant labor force, plants moved into the southeastern sections of the country. More important,

¹⁴Charles E. Landon, "Tobacco Manufacturing in the South," *The Annals of the American Academy of Political and Social Science*, Vol. 153 (Jan. 1931), pp. 43-53.

¹⁵Thompson, *op. cit.*, pp. 17-9. See table A-5.

many new plants sprang up in the South to compete, largely on the basis of cheaper labor, with the textile mills of the North. Today, the Piedmont section alone contains the majority of the Nation's cotton operations. This transfer of activity has been accompanied by a wholesale recruiting of a new labor force from among the native white farmers of the southeastern States who have been made landless by the vicissitudes of soil erosion, a one-crop system, and the ravages of the boll weevil. According to Broadus Mitchell, never before was "an agricultural population . . . so suddenly drawn into industry."¹⁶

An early survey of 2,122 woman and child cotton-mill workers in the South indicates that the process of building a labor supply for the cotton mills out of dislocated agricultural labor began at least as far back as the opening years of this century. Seventy-two percent of those surveyed in North Carolina, 78 percent in South Carolina, 77 percent in Georgia, and 85 percent in Alabama had been drawn from farms.¹⁷ This process has continued up to the present. A study made by Rhyne in 1926-27 showed that over half of 500 family heads interviewed in a concentrated cotton-textile county in North Carolina had farmed before going into the mills.¹⁸ MacDonald's study of three cotton-mill villages of the same State showed that of 843 persons whose place of birth was recorded, about 60 percent had come from rural districts.¹⁹

While there are some indications that the influx of agricultural workers to these mills has slackened as the working force and reserve of labor has accumulated, it has continued to be an appreciable factor in maintaining and even increasing that supply.²⁰

A recent Congressional investigation brought out the fact that after the invalidation of NRA many companies laid off "all the members in the family, in many instances, except one man. . . . They began importing farmers and teaching them to

¹⁶Broadus Mitchell, *The Rise of Cotton Mills in the South* (Baltimore, Md.: The Johns Hopkins Press, 1921), p. 173.

¹⁷U. S. Congress, Senate, *Report on Condition of Woman and Child Wage-Earners in the United States*, S. Doc. No. 645, 61st Cong., 2d sess., 1910, Vol. 1, "Cotton Textile Industry," p. 119.

¹⁸Jennings J. Rhyne, *Some Southern Cotton Mill Workers and Their Villages* (Chapel Hill, N. C.: University of North Carolina Press, 1930), pp. 71-2.

¹⁹Lois MacDonald, *Southern Mill Hills* (New York: Alex L. Hillman, 1928), p. 146.

²⁰See table A-6 for proportion of workers in furniture and textile mills in High Point, North Carolina, who have an agricultural background.

work."²¹ Testimony was received that though many experienced operatives were available after the September 1934 strike, they were refused employment while the mills sent agents into the surrounding farm areas to recruit new workers.²²

The relocation of the boot and shoe industry is a similar although less spectacular example of an industry which has tended to draw upon the ex-farmer in the building of an extensive working force and reserve. According to Creamer, its relocation is directly related to its desire for a cheap labor supply: ". . . labor costs . . . are a more important cost factor than in most other industries, a factor tending to impose a labor orientation in their location."²³ Thus employment in small towns and rural areas has increased while activity in industrial areas has decreased. During the period of declining activity between 1929 and 1933 the only sections which showed absolute gains in the number of boot and shoe jobs were nonindustrial regions. The principal industrial cities showed a decrease of about 25 percent.²⁴

THE NEGRO MIGRANT

The changing occupational status of the Negro offers a peculiar opportunity to define further the industrial adjustments of the rural-urban migrants. The growth of the Negro population in northern cities has been in large part due to their extensive migration from the South. The adjustments that they have made in the cities thus represent those of a group that is predominantly migrant. Negroes represent the only group in the cities that it is possible to isolate in the census and other studies of changing occupations. If such a procedure could be followed with the migrants as a whole, the picture outlined in the preceding sections might be appreciably more specific; its broad outlines would, in all probability, however, remain the same.

The great increase in the opportunities for Negro labor from the rural regions of America began with the World War period

²¹U. S. Congress, House of Representatives, *To Rehabilitate and Stabilize Labor Conditions in the Textile Industry in the United States*, Hearings Before a Subcommittee of the Committee on Labor on H. R. 9072, 74th Cong., 2d sess., 1936, pp. 260-1.

²²*Ibid.*, pp. 174-5.

²³Daniel B. Creamer, *Is Industry Decentralizing?* (Philadelphia, Pa.: University of Pennsylvania Press, 1935), p. 49.

²⁴*Ibid.*, p. 89.

when they were utilized to replace forces withdrawn from industry for war. Later they proved invaluable to expanding industries of the North. Between 1910 and 1920 the number of gainfully employed Negro workers in agriculture declined from 2,834,969 to 2,133,135. By 1930 it had fallen to 1,987,839. Those in nonagricultural pursuits increased from 2,357,566 to 2,691,016 to 3,515,696.²⁵ Thus, with an increase of less than half a million in the total number of Negro gainful workers, the number of Negroes in nonagricultural pursuits increased by over a million. When the changing occupational attachments of this group in specific industrial centers of the North are considered, the picture of the character of their influx into industry becomes clearer. Their flow into the expanding manufacturing and mechanical industries can be traced in the figures of practically every northern city; especially notable is their sudden appearance in the steel industry shortly after the strike in 1919.

In her discussion *The Negro Peasant Turns Cityward*, Louise Venable Kennedy has pointed out the marked changes in the attachments of Negroes in Pennsylvania that occurred in the World War period. "'Throughout the Commonwealth previous to 1915 the Negro was engaged as a mass in domestic and personal service occupations.' In 1920 there was a decrease of 23.3 per cent in the number of Negroes employed in domestic and personal service, whereas there was an increase of 151.1 per cent in the number employed in manufacturing and mechanical industries."²⁶

In New York City the number of Negroes engaged in manufacturing and mechanical industries increased from 6,932 in 1910 to 39,873 in 1930. The greatest relative increase occurred in the number of building and construction laborers, from 101 persons in 1910 to 3,348 in 1930. In transportation and communication their number increased from 5,217 in 1910 to 22,003 in 1930.²⁷ According to Kennedy, "in the division transportation, the largest single group of Negroes are chauffeurs and draymen or teamsters. In some cities such as New York, the number of longshoremen is also large."²⁸

²⁵*Fifteenth Census of the United States: 1930, "Population" (U. S. Dept. Com., Bur. Census, 1933), V, 74-5.*

²⁶Louise Venable Kennedy, *The Negro Peasant Turns Cityward* (New York: Columbia University Press, 1930), pp. 77-8.

²⁷*Thirteenth Census of the United States: 1910, "Population" (U. S. Dept. Com., Bur. Census, 1914), IV, 571-4; Fifteenth Census of the United States: 1930, "Population" (1933), IV, 1130-4.*

²⁸Kennedy, *op. cit.*, p. 75.

In Philadelphia, also, Negro building and construction laborers showed a marked increase. Transportation and communication increased its use of Negro labor from 5,679 in 1910 to 16,424 in 1930.²⁹ In Chicago the expanding slaughtering and packing-house industry showed a great increase in its demand for this migrated group. From 67 Negro packing-house operators and laborers in Chicago in 1910, the number increased to 4,447 in 1930. In iron and steel industries Negro helpers and laborers increased from 48 in 1910 to 3,853 in 1920 and to 5,553 in 1930.³⁰ The reported drive to use them as "scab" labor during the great steel strike of 1919 may account for much of the great increase in the earlier decade. In Detroit their most notable increase was in the automobile industry. From about 25 in 1910, their number increased to almost 14,000 in 1930.³¹

From these figures it is evident that the use of Negro migrants in the industrial labor market has been in the main the same as that outlined for the migrants as a whole. Their role has been to meet the expansion of demand for labor, to replace existing labor where such replacements were thought necessary, or to comprise a labor reserve. A study of employment and unemployment in Philadelphia in 1936 found that Negroes tended to be represented in higher proportions than white persons both on the relief rolls and among the unemployed.³² Another study of workers on relief in 79 cities found that those Negroes on relief who did get employment tended to get lower wages than the similar group of white workers.³³ Studies by the Urban League and other agencies have similarly indicated that the Negro's status as a labor reserve tends to be perpetuated.

THE USE OF RESIDENT FARM LABOR

One other situation in which industry utilizes the surpluses of labor on the land may be mentioned here: the use of farm

²⁹*Thirteenth Census of the United States: 1910, "Population,"* IV, 588-90; *Fifteenth Census of the United States: 1930, "Population,"* IV, 1412-5.

³⁰*Thirteenth Census of the United States: 1910, "Population,"* IV, 544-7; *Fourteenth Census of the United States: 1920, "Population" (1923),* IV, 1076-80; *Fifteenth Census of the United States: 1930, "Population,"* IV, 447-50.

³¹*Thirteenth Census of the United States: 1910, "Population,"* IV, 553-5; *Fifteenth Census of the United States: 1930, "Population,"* IV, 803-5.

³²Gladys L. Palmer, *Employment and Unemployment in Philadelphia in 1936 and 1937, Part I, "May 1936"* (WPA National Research Project in cooperation with Industrial Research Department, University of Pennsylvania, Report No. P-3, Part I, Aug. 1938), pp. 14, 18.

³³Gladys L. Palmer and Katherine D. Wood, *Urban Workers on Relief* (Works Progress Administration, Division of Social Research, Research Monograph IV, 1936), part I, p. 84.

labor by industries so located as to permit them to draw upon a commuting rather than a migrated force. In both situations industrial employment opportunity appears as an economic outlet to agricultural workmen who are under pressure of greater or lesser degree.

Farm people in agriculturally handicapped areas are welcoming such opportunities [i. e., for employment in rural factories] to supplement their dwindling farm incomes as a more desirable alternative to migrating elsewhere in search for a reasonable income.³⁴

Similarly, the agricultural population appears to industry as a means of extending its labor force and reserve. In their study of rural factory industries Manny and Nason found that of 102 factories located in rural regions and each valued at \$200,000 or less, 77 percent were new establishments and 12 percent were relocated factories. Textile factories predominated, followed by forest products, food, and leather factories. Over 25 percent of their labor force was composed of labor resident on farms. In 19 factories valued at over \$200,000 each a similar situation appeared.³⁵

Another study, of lay-offs and hiring in four plants in Lancaster, Pennsylvania, also illustrates this use of a resident or commuting labor supply.³⁶ Though many persons moved into the city of Lancaster for employment in the plants studied,

Table 5.- PROPORTION OF WORKERS IN SELECTED LANCASTER PLANTS COMMUTING FROM RURAL AREAS^a

Plant	Predepression sample, 1928 status	Postdepression sample, 1936 status
Linoleum	20.8	18.9
Bottle closure	6.1	15.8
Silk	30.6	25.8
Watch	15.7	20.5

^aBased on material in National Research Project files, compiled for the study by Edward J. Fitzgerald, *Selective Factors in an Expanding Labor Market: Lancaster, Pa.* (WPA National Research Project, Report No. L-4, June 1939). "Rural areas" includes only communities with a population of less than 2,500.

³⁴T. B. Manny and Wayne C. Nason, *Rural Factory Industries* (U. S. Dept. Agr., Cir. No. 312, Apr. 1934), p. 34.

³⁵*Ibid.*, pp. 7, 23.

³⁶Edward J. Fitzgerald, *Selective Factors in an Expanding Labor Market: Lancaster, Pa.* (WPA National Research Project, Report No. L-4, June 1939).

a high proportion were living in the rural districts outside the city at the time of their employment. This was true of both the predepression and the postdepression samples studied, as table 5 shows.

The extent of this kind of utilization of the agricultural population as a source of industrial labor is roughly indicated by the *Census of Agriculture* analysis of part-time farming in the country. Of the rural-farm male population with gainful occupations in 1930, 10.8 percent gave nonagricultural pursuits as their occupation.³⁷ Industrial activities depend to a varying degree upon this group for labor. Of those males with gainful occupations in automobile factories and metal industries, for example, 2 percent were farm residents. This group accounted for 4.2 percent of the males with gainful occupations in automobile agencies, garages, and filling stations, and for 7.2 percent of those engaged in the extraction of

Table 6.- PERCENTAGE DISTRIBUTION OF RURAL-FARM MALE POPULATION ENGAGED IN NONAGRICULTURAL OCCUPATIONS, BY INDUSTRY GROUP, 1930^a

Industry group	Percent
Total	100.0
Auto agencies, garages, filling stations	4.7
Extraction of minerals	8.2
Forestry and fishing	4.5
Manufacturing and mechanical	36.8
Auto factories and metal industries	6.2
Building	9.6
Chemical; clay, glass, and stone	2.8
Food and allied industries	2.2
Lumber and furniture	8.1
Textile	1.6
All other	6.3
Professional service	6.5
Trade	12.3
Transportation	16.5
All other	10.5

^aBased on *United States Census of Agriculture: 1935, "Part-Time Farming in the United States"* (U. S. Dept. Com., Bur. Census, 1937), pp. 92-3. Males 10 years old or over are included.

³⁷*United States Census of Agriculture: 1935, "Part-Time Farming in the United States"* (U. S. Dept. Com., Bur. Census, 1937), p. 95.

minerals.³⁸ The distribution of the farm-resident labor force among the various industrial groups is indicated in table 6.

This measure reports only on those farm residents whose income was wholly or in major part derived from nonagricultural pursuits. There were, in addition, many who worked off the farm for short periods only. It is impossible to say how great such activity was among the entire farm population. However, the *Census of Agriculture* has reported on the off-farm work of farm operators in 1929 and 1934. Since the figures refer to farm operators only and take no account of the work of other members of the family, they can be used only as a rough indicator of the industrial work done by rural-farm residents. They show that in 1934, 2,077,474 farm operators, or 30.5 percent of all in the country, worked off their own farms part of their time and averaged 97 days of such work. Some of this work was done on other persons' farms, but the bulk of these men, 71.4 percent, had their principal off-the-farm work in nonagricultural industries. The number of operators who had thus worked off the farm in 1934 represented an increase of 9.2 percent over 1929. The total number of days worked off the farm by these operators had increased from 190,000,000 in 1929 to 202,000,000 in 1934.³⁹

THE STATUS OF THE MIGRANT IN THE INDUSTRIAL LABOR MARKET

What adjustment have the migrants to the cities been able to make? Their indicated role as additions to the labor supply and reserve or as replacements for other workmen means that of necessity they must face difficulties in the industrial labor market, particularly in times of industrial contraction.

Studies made by the National Research Project have indicated the insecurity and instability for workmen that develops with the accumulation of a large reserve of labor. The labor market of the textile center of Paterson, New Jersey, provides an extreme example of this.⁴⁰ There, a large reserve of textile labor secures, at best, employment of an intermittent nature. Similarly, studies made of the Philadelphia labor market indicate that with the depression increase in the reserves of

³⁸ *Ibid.*, p. 89.

³⁹ *Ibid.*, p. 9.

⁴⁰ James E. Wood, *Employment Experience of Paterson Broad-Silk Workers, 1926-36* (WPA National Research Project, Report No. L-3, May 1939).

labor, the operation of selective factors in reemployment was intensified.⁴¹ In Lancaster, Pennsylvania, it was found that even under conditions of rising production and employment there was continued discrimination in the employment of workers which was derived from the ability of the employer to pick workers not only from previous employees but also from new workers, from the unemployed of other industries, and from the surpluses of agricultural workmen from outside the city.⁴² Thus the development of insecurity for some workmen in the labor market can be related to the size of the labor force as well as to declines in activity.

Grace Leybourne, in a comparison of the fortunes of rural-urban migrants from the Appalachian plateaus to Cincinnati with those of long-time residents of the city, found significant evidence of the difficulties experienced by migrant additions to the labor supply. "They, not others because of them experience the greater degree of economic hardship." In income, living standards, and attachment to job the migrants in the industrial labor market fare less well than their native neighbors. They bear the brunt of discharges in seasonal trade and are laid off before natives whether in temporary slack seasons or through permanent dismissal. Their homes are concentrated in the poorer sections of the city; they have larger families and lower wages.⁴³

A similar indication of the difficulty that the migrants experienced is afforded by the situation in Flint, Michigan. According to Louis Ludington, Welfare Director of Genesee

⁴¹Studies of the Philadelphia labor market, conducted by the National Research Project in cooperation with the Industrial Research Department of the University of Pennsylvania, are as follows: Gladys L. Palmer, *Recent Trends in Employment and Unemployment in Philadelphia* (Report No. P-1, Dec. 1937); Gladys L. Palmer and Ada M. Stoflet, *The Labor Force of the Philadelphia Radio Industry in 1936* (Report No. P-2, Apr. 1938); Gladys L. Palmer, *Employment and Unemployment in Philadelphia in 1936 and 1937*, Part I, "May 1936" (Report No. P-3, Part I, Aug. 1938); Margaret W. Bell and Gladys L. Palmer, *Employment and Unemployment in Philadelphia in 1936 and 1937*, Part II, "May 1937" (Report No. P-3, Part II, Oct. 1938); Gladys L. Palmer, *Ten Years of Work Experience of Philadelphia Weavers and Loom Fixers* (Report No. P-4, July 1938); Helen Herrmann, *Ten Years of Work Experience of Philadelphia Machinists* (Report No. P-5, Sept. 1938); Gladys L. Palmer and Constance Williams, *Reemployment of Philadelphia Hosiery Workers After Shut-Downs in 1933-34* (Report No. P-6, Jan. 1939); Gladys L. Palmer, *The Search for Work in Philadelphia, 1932-36* (Report No. P-7, May 1939); Gladys L. Palmer and Janet H. Lewis, *The Long-Term Unemployed in Philadelphia in 1936* (Report No. P-8, Aug. 1939).

⁴²Fitzgerald, *loc. cit.*

⁴³Grace G. Leybourne, "Urban Adjustments of Migrants From the Southern Appalachian Plateaus," *Social Forces*, Vol. 16, No. 2 (Dec. 1937), p. 243. See also Warren S. Thompson and P. K. Wheelton, *The Population of Hamilton County, Ohio, in 1935* (Cincinnati, Ohio: The Cincinnati Employment Center of the Ohio State Employment Service, 1937 [sponsored by the Regional Department of Economic Security with the cooperation of the Federal Emergency Relief Administration Project No. 31-F2-347 and the Works Progress Administration Project No. 16-31-215]), p. 36.

County, Michigan, the oversupply of workers in Flint in 1936 and the attendant misery in the county were attributable to the fact that over 25 percent of the employable persons had moved into Flint since 1934, largely from the South. Many had already emigrated again because of unemployment, and Mr. Ludington announced that about 12,000 more family heads with less than 2 years of experience at the General Motors plants would be asked, persuaded, or forced to leave Flint. "They came with nothing and it's up to them to return to the States from which they came. . . . It doesn't matter where they go as long as they leave the county."⁴⁴

The study entitled *Urban Workers on Relief* offers additional evidence of the poor adjustment the migrants are able to make in the industrial labor market. In 51 cities the authors compared the industrial distribution of the gainful workers in a census sampling area with the industrial distribution of unemployed workers on relief. It was found that whereas only 0.9 percent of the gainful workers in the city population had had agriculture as their usual industry, 3.7 percent of the unemployed persons on relief were from agriculture. In other words, one would be four times more likely in these cities to find an ex-agricultural worker on relief than in the population as a whole.⁴⁵ Even this is probably a conservative picture of the generally insecure status of the agricultural workman who came to the cities during the depression. In many cities it was an accepted relief policy to send back persons from other regions rather than to admit them to the relief rolls. In addition, only persons with little or no industrial experience would, in the cities, persist in regarding their agricultural background as their "usual industry."

SUMMARY

The character of the forces behind the movement from the land to the cities and the very magnitude of that movement go far to determine the characteristic role of the migrants in the industrial labor market. They are a reserve of industry, filling a role similar to that earlier played by the great

⁴⁴"Flint Advises 12,000 Jobless Families to Go," *New York Herald Tribune*, April 29, 1938, p. 1; "Flint, Mich., Plans to 'Deport' 12,000 Jobless Families," *Philadelphia Record*, April 29, 1938, p. 1.

⁴⁵Palmer and Wood, *op. cit.*, p. 153.

foreign immigration. This role as part of the reserve is theirs initially by the very nature of the circumstances under which they enter the industrial labor market. They are new entrants, usually young, industrially inexperienced, and of necessity cheap. A certain proportion may in time form permanent attachments to industry. This proportion is naturally dependent upon the degree of expansion or replacement that is occurring at the time. But a new force is constantly coming up, under the same compulsions as their forerunners, and is constantly seeking attachment to industry. In the years of prosperity they came from the farms at the rate of 2,000,000 persons a year. Thus the group that does not succeed in forming a regular attachment is constantly augmented, and the characteristic of casual or intermittent attachment is perpetuated by the accumulation of an available reserve. Their problems are naturally accentuated in times of industrial contraction.

Their role as additions to the reserve labor supply is further attested by the tremendous volume of persons who annually turn from the cities back to the farms. In a study made in 1927 of persons who left urban communities for farms it was found that 87 percent of these persons had originally come from the land to the cities.⁴⁶ From table 1 it would appear that in every year except 1922 more than half as many people as were coming from the land were returning to it. In flight from unemployment or underemployment in the cities, they were returning to an agriculture that had already proven its inability to support them.

⁴⁶*Analysis of Migration of Population To and From Farms* (U. S. Dept. Agr., Bur. Agr. Econ., Oct. 1927), p. 41.

CHAPTER IV

THE RETREAT FROM THE INDUSTRIAL LABOR MARKET

Between 1920 and 1936, the years when 30 million persons are estimated to have left the land, 21 million went from the cities to the farms (see table 1). These figures do not, however, refer to different individuals. The same persons often moved back and forth several times and each move was presumably counted in the statistics cited. (For instance, less than a third as many persons as were estimated to have gone to the land between 1930 and 1934 were found there at the end of that period.)¹ What does the analysis in the preceding chapter of the conditions of the migrants in the cities and their role there tell us of the forces behind this retreat from the industrial labor market? What can be said of the conditions on the land to which they went, and what does this mean in terms of the possibilities of adequate adjustment and of their future role as a reserve for industry?

The movement to the land received particular attention during the depression years. The reversal in 1932 of the tendency of the cities to gain population at the expense of the farm provoked a variety of hasty comment, including some interpretations which now appear fanciful. Some hailed the change as a beneficial redress of the balance between farm and city, a return to a more "normal" society, and the best way for the unemployed to meet the stresses of urban unemployment problems. Others objected to loading the city unemployed on land dwellers and especially feared the long-run troubles which they said would arise through this stranding of normally urban workers on poor-land areas. In both groups, as in the public at large, it was mistakenly assumed that the movement to the land was but a depression phenomenon rather than a depression-intensified expression of a relationship between agriculture and industry that had obtained for a long time.

Two factors tended to lend support to the interpretation of the to-the-land movement as a depression phenomenon. The

¹*Farm Population Estimates, January 1, 1936* (U. S. Dept. Agr., Bur. Agr. Econ., mimeo., Oct. 27, 1936), pp. 3-4.

first was that the to-the-land movement did show an increase in the early years of the depression, and at the same time the from-the-land movement declined so markedly as to produce a reversal in the net movement. The second was that early official reports overestimated the extent of the to-the-land movement. This was later corrected by the farm census of 1935, and it became apparent that while the movement in the depression years was large, the movement in the years immediately preceding had also been appreciable.

There may be some significance in the early official overestimates of the turn to the land. Since figures on yearly migrations are based on estimates made by persons in immediate touch with conditions in local areas (the crop reporters of the U. S. Department of Agriculture), it is possible that they reported a great many of the short-term movements which were not found when the official census was taken in 1935. In other words, it remains possible that early short-term movements have been unduly discounted in the more recent estimates.

However, conceding this possibility would not materially alter the general picture. Accepting as most authoritative the official estimates of movement given in table 1, the picture of the to-the-land retreat takes somewhat the following form: Between the industrial depression of the early twenties and the more recent depression (that is, in the period 1922-29) the average movement was of slightly under $1\frac{1}{2}$ million persons per year, rising in the later years of the series. In the early years of the depression, 1930-32, the average movement was greater than 1,600,000 persons, reaching an all-time peak in 1932, and in the years 1933 to 1936 it fell more than half to an average of but 797,000 persons per year.

THE PRESSURE ON THE CITY POPULATION

The great bulk of the movement from the cities has been a movement of the unemployed and the underemployed away from economic insecurity and lack of livelihood. The migration was, for these persons, a retreat from the inadequate adjustments possible in the urban labor market. The status of the migrant as a reserve and the instability of employment that accompanied the growth of this reserve made many of those who had looked so hopefully toward the cities turn back to the land.

Goodrich has pointed out that "many of the migrants were young people who had lost their jobs and simply went back home Others, with little or no capital, were looking for land to farm and roofs to shelter them . . . and they were fleeing from what seemed at the moment still worse alternatives in the cities."² Similarly, Thorntwaite has indicated that the countryward migration has been a migration from stricken industrial areas, undertaken "to escape economic conditions which were growing increasingly adverse."³ Goodrich, Allin, and Hayes, in their study entitled *Migration and Planes of Living*, have found that "in the general movement back to the land . . . there were doubtless many individuals who saved themselves from asking public assistance by going back to the home farm or by taking up abandoned land."⁴

Numerous other studies of the migrant population made in particular local areas also emphasize the degree to which the movement to the land was a pressure-conditioned phenomenon. Hoffer, in a report on employment conditions in the copper mining industry of Michigan, says:

Conversation with the county farm agent of Houghton County brought out the fact that it is a practice for a large number of young people to emigrate to the automobile manufacturing cities when that industry is very active and to return again . . . when that industry slows up.⁵

Professor Noble Clark found, in a survey made in Wisconsin, that 90 percent of the householders resettled on the land had left the city because they had lost their jobs or because they had suffered such decreases in wages that their incomes were inadequate.⁶ In 1936 the Michigan Relief Commission reported on the great migration of unemployed auto workers to the rural areas of the State.⁷ That occasionally the pressure to migrate

²Carter Goodrich and Others, *Migration and Economic Opportunity* (Philadelphia, Pa.: University of Pennsylvania Press, 1936), pp. 513, 516.

³C. Warren Thorntwaite, *Internal Migration in the United States* (Philadelphia, Pa.: University of Pennsylvania Press, 1934), p. 3.

⁴Carter Goodrich, Bushrod W. Allin, and Marlon Hayes, *Migration and Planes of Living, 1920-1934* (Philadelphia, Pa.: University of Pennsylvania Press, 1935), p. 6.

⁵C. R. Hoffer, "Report on Copper Mining Industry in Michigan" (typed manuscript, 1936), p. 5; copy in National Research Project files. (Italics ours.)

⁶Noble Clark, *What Chance Has a City Man on a Wisconsin Farm?* (Univ. of Wis. Agr. Expt. Sta., Ext. Service Radio Cir., mimeo., Nov. 1932), p. 5.

⁷*Census of Population and Unemployment*, "Employment and Unemployment Statistics, First Series" (Lansing, Mich.: Michigan State Emergency Welfare Relief Commission, July 1936), p. 18. See also John N. Webb and Albert Westefeld, "Industrial Aspects of Labor Mobility," *Monthly Labor Review*, Vol. 48, No. 4 (Apr. 1939), pp. 769-802.

to the land has been even more direct than that of unemployment is indicated by the statement of the Flint Welfare Director, previously quoted (page 39), that the unemployed would be forced to migrate from the county.

THE DESTINATIONS OF THE CITY-FARM MIGRANTS

It is difficult to make any definite statement regarding the specific conditions on the land settled by the industrial refugees in their retreat to rural areas. However, an analysis in various areas of the changes in population growth which accompanied the early depression reversal of the trend to the cities offers some indication of the nature of the situation in which the migrants found themselves. What areas registered population gains during the early depression years? What are the characteristics of these areas? The value of the measure permitting an answer to these questions is naturally affected by the fact that a rise in population is attributable to both the decline in emigration from the area and the rise in immigration to it. However, when the evidence is supplemented by census measures of the number of persons in various regions on farms in 1935 who had not been there in 1930,⁸ and by special regional studies which treat separately the urban refugee in the rural region, there emerges a clear picture of at least the general circumstances to which a great number of unemployed urban workers have been forced annually.

As a direct consequence of flight from urban unemployment and insecurity, population increases in rural America rising out of migration during the depression were greatest in those regions where the prospects of inexpensive subsistence were greatest. The evidence shows that persons turned in greatest numbers to the semirural sites adjacent to large cities, then to the regions they had formerly left and to other areas abandoned by those who looked hopefully toward the cities. While the former was naturally not a turning to true farming areas, it fulfilled the same function - that of providing inexpensive shelter and some opportunity to raise necessities for a family.

The movement to the land has been referred to as a "back-to-the-worst-land" movement. This phrase, while arresting, may

⁸A net figure, which does not include those persons who may have moved into and out of a region between 1930 and 1935.

be slightly misleading. Turning or returning to an agriculture that was annually pushing out population it was no longer able to maintain, the migrants of necessity went, it is true, to regions ill adapted to provide them with an adequate livelihood from the land. These regions were not, however, necessarily poor in land quality. They were, on the other hand, regions economically if not naturally poor in opportunity, though there are indications that many of the migrants went to really poor-land or "problem" areas.

Carter Goodrich and his associates have assembled an impressive bloc of material indicating this tendency in the to-the-land movement of the thirties. Their study of school census materials supports their thesis that the farmward migration of the depression years reversed almost precisely the trends that had been reported for the prosperity years. Just as in general it had been those areas of poorest land and lowest agricultural income which had lost population at the greatest rate during the twenties, so these same areas registered the greatest gains when the trend of movement was reversed. "The [urban-rural] migrants could not be choosers, and they were fleeing from what seemed at the moment still worse alternatives in the cities." It was, therefore, almost a foregone conclusion that a great proportion should out of this necessity turn "to the poorest lands, especially in areas suitable for subsistence farming and not too far from the centers of mining and industrial employment."⁹

Great increases in population took "place in just those regions in Kentucky and West Virginia and Michigan in which the largest proportions of the population have been receiving public assistance."¹⁰

Again it is the population changes in Michigan that offer the best evidence that the return movement brought population predominantly to the poorest agricultural regions. It was the worst quartile of counties, classified on the basis of gross farm income per rural-farm inhabitant in 1929, which gained population most rapidly; the next quartile gained at not so steep a pitch; the second best and the best quartiles gained less, in order.¹¹

⁹Goodrich and Others, *op. cit.*, pp. 508-16.

¹⁰*Ibid.*, p. 516.

¹¹*Ibid.*, pp. 511-2.

Study of the census figures for persons on farms in 1935 who had migrated there subsequent to 1930 qualifies but does not appreciably alter this general analysis. According to the National Resources Committee, the increases in population in the poorer counties of the country were in part to be accounted for by the delay in migration. However, their analysis permits the conclusion that the volume of the movement was slightly greater to the "problem" than to the "nonproblem regions", classified on the basis of land quality. More important, the movement "was predominantly a movement to lands in the vicinity of industrial and mining enterprises."¹²

It is further significant in this connection that between 1930 and 1935 the number of farms in the country as a whole increased markedly, and this increase "occurred largely in regions of poor soils or hilly surface, where the birth-rate also generally is high, and near the large cities, particularly those where the surrounding land is cheap."¹³

Several broad regions have shown particularly heavy gains in population, much of which is to be accounted for by the urban influx, and again these are regions which had been associated with heavy emigration during the years of industrial prosperity and which have been and are poor-land areas characterized by marginal and submarginal living conditions and income. The Appalachian region, the Cut-Over, the Ozarks, and certain sections of the Pacific Coast were more heavily invaded than other areas. The last three experienced population gains of over 100,000 each. Some of the special studies which treat of the number of migrants and the conditions to which they have gone in certain of these and other characteristic areas help to fill out this general picture and are worth consideration here.

The Movement to Areas Near Large Cities

As has been indicated, the pressure of industrial unemployment and insecurity sent persons primarily to the areas surrounding large cities. Even before the depression there had been manifest a tendency to develop homes and part-time farms near those cities where the land values were not so high as to

¹²*The Problems of a Changing Population* (Report of the Committee on Population Problems to the National Resources Committee, May 1936), p. 107.

¹³Goodrich and Others, *op. cit.*, p. 514.

make such settlement prohibitive. During the years of industrial depression, however, migration of this type assumed great predominance in the urban-rural flow of population. According to National Resources Committee estimates, the increase in farm population due to migration from the cities, between 1930 and 1935, was 6.6 percent. In the industrial counties of the country (that is, those counties in which the majority of the population were engaged in industry, mining, and forestry) the increase was 11.5 percent.¹⁴

In what sort of situation were these persons? Evidence from a study in the Gary district of northwestern Indiana and from studies in Ohio and Missouri indicates the degree to which their settlement was an attempt to "tide over" at a low subsistence level until increasing activity in the cities would again demand the workers.

Of 578 nonfarming families, emigres from the cities, which settled in the Gary district of northwestern Indiana, two-thirds had come to the land after January 1, 1929; 29 percent were unemployed at the time of the survey. Predominantly, they had come there to raise food in the garden, economize, and avoid high rents. Half of those unemployed were receiving relief.¹⁵

M. L. Predmore and R. H. Baker found unemployed industrial workers settled in the problem areas of Lucas County, near Toledo, Ohio, "attempting to make a living on small truck and poultry farms. Apparently there has been some misrepresentation by real estate brokers as to the possibilities of producing a living upon this soil."¹⁶

A recent report on land occupancy in Missouri also presents evidence of this type of depression settlement. In the west prairie region of Missouri 45 percent of the increased numbers on the land were found to be nonfarm people. Their location was "influenced very little by quality of land but was largely controlled by the closeness to urban centers." But the land

¹⁴Cf. *The Problems of a Changing Population*, p. 108.

¹⁵Lynn Robertson, *The Economic Significance of the Non-Farming Rural Population in Northwestern Indiana* (Purdue Univ. Agr. Expt. Sta. Bull. No. 388, Feb. 1934), pp. 2, 23.

¹⁶M. L. Predmore and R. H. Baker, *Current and Recent Land Occupancy in Ohio With Particular Reference to Land Use* (Columbus, Ohio: Resettlement Administration, Land Utilization Division, Ohio Land Use Planning Section, June 1938). The report was issued in response to Field Instruction LU 1935 which made special request for reconnaissance survey of areas in which a significant increase in farms had been reported.

was unquestionably poor. Eighty percent of the new farms in this region were estimated to be reoccupied farms that had been previously abandoned.¹⁷

Movement to Agricultural Regions of Restricted Opportunity

The Cut-Over.— The Cut-Over region of the Great Lakes is a well demarcated area, geographically, economically, and socially. An area of low agricultural value, it has been sparsely settled and is dotted with the ghost towns left by the completion of lumbering operations in the regions and by the decline of iron and copper mining. Most of the area was logged off in the last 40 years. Now the woodworking industry is in flight before substitute materials and competition from cheaper sources in the South. The decline of this and similar industries added further to a surplus of houses. More recently the region has been experiencing a growth in recreational and sport activities, but this is a phenomenon that has been thus far of relatively little importance.

In a study based upon school census materials for the years 1930-36 Professor Thaden of the Department of Sociology of Michigan State College offers evidence, additional to that already cited from Goodrich, of the heavy movement of urban unemployed to the Cut-Over region of this State.¹⁸ He found that whereas in the twenties only 37 counties showed increases in population, the early depression brought increases in 64 counties. In 55 counties the immigration was heavier than the emigration. These were predominantly rural areas, and the "migrants were usually unemployed industrial laborers seeking refuge during the depression from the hardships of present-day urban conditions. Most of these migrants are apparently temporary rather than permanent refugees." Nineteen counties lost population. These were either communities where mining activities were subsiding or counties with "small or medium-sized industrial cities whose unemployed citizens sought milder existences elsewhere."¹⁹

¹⁷A Report on Current and Recent Land Occupancy With Particular Reference to Land Use (Resettlement Administration, Land Utilization Division, Missouri Land Use Planning Section, typescript, June 30, 1936).

¹⁸J. F. Thaden, "Changes in Population of Counties in Michigan Since 1930," *Michigan Agricultural Experiment Station Quarterly Bulletin*, Vol. XVIII, No. 4 (May 1938), pp. 243-4.

¹⁹*Ibid.*, p. 2.

Professor Thaden is of the opinion that the movement back to the cities, which began to increase again after 1933, may be expected to accelerate. Should urban activities warrant, this return "may appear like an avalanche." The excesses of population due to immigration are particularly heavy in the Cut-Over areas, many of which show a 25-percent increase over their 1930 population; in view of the conditions prevalent in these areas, they may be expected to lose population most heavily when urban conditions show greater promise.

The National Resources Board, analyzing Dr. Goodrich's findings, also comments on the extent to which the Cut-Over has figured in the back-to-the-land movement.²⁰ Population in the low-income counties of Michigan fell more during prosperity and rose more during depression than in any other counties in five States considered, although all the low-income counties treated showed the same tendencies. The comments of the board on this point follow:

This may be attributed to the comparative nearness of large industrial centers, the wide fluctuations in employment characteristic of the major industries of the area, and the availability for "squatting" and subsistence farming of cheap land generally undesirable for commercial agriculture. The school census for this poorest Michigan group declined 21.1 percent from 1922 to 1929, and increased 16.1 percent from 1929 to 1934. In marked contrast with the Michigan figures are those for Iowa for the same period. Unquestionably the high quality of Iowa land, the stability of prevailing types of farming, and the relatively greater distances of most of the State from large industrial centers explain the greater stability of Iowa's rural population. In this State, the lowest income group of counties showed only a 6-percent decline in rural population from 1922 to 1929, and a tendency to level off after 1930.²¹

A good example of the way the depressed areas of the Cut-Over have served as a temporary harbor for the urban unemployed is afforded by a number of detailed histories taken from the Michigan unemployment census of 1935. The counties in which these persons were located are ones which had originally contained copper mines, but most of these had ceased operation so

²⁰ *Supplementary Report of the Land Planning Committee to the National Resources Board, Part VI, "Maladjustment in Land Use in the United States"* (National Resources Board, 1936), p. 54.

²¹ *Ibid.*

that the status of the region is largely the same as that of all Cut-Over counties, except that the former miners constitute a special problem.

It was found that although these areas were among those which have been losing population steadily, even through the depression, they contain many city unemployed. The return migration of these persons was lost in the figures on total change in population because the heavier emigration from the region produced a net decrease in population.

The case histories considered do not give data on occupations prior to 1930 but they do show the circumstances of the unemployed worker in these regions from 1930 on. The important question for purposes of this report is whether the person was in the region at the beginning of the depression or whether he came to the region after losing employment in Detroit. The following cases taken from the Houghton County, Michigan, sample have been selected as typical. They indicate the close relationship that developed between this region and the unemployment problems of the Detroit automobile workers 500 miles away. They are sufficient to illustrate that the stranded area, Houghton County, became, in spite of its distance from Detroit, an area of storage for the labor demands of the automobile industry.²²

CASE 1.- The family consisted of the mother, aged 49, who was head of the household, and a young son who had remained in the area, but who had had only casual employment at road-construction work (presumably relief labor) during the 5-year period investigated. There were also a daughter and a son-in-law, aged 27, who had been in Detroit in 1930, at which time he had been a salesman in an auto factory and his wife an auditor in a retail department store. Becoming unemployed, and at that time dependent on his father, he and his wife had returned to Calumet. There he had one nonrelief job as a house painter. He returned to Detroit in February 1934 to work as a salesman in an auto factory until August 1934. During this period his wife remained in the North. A brother of the head of the household, aged 45, who had been employed as an

²²The cases were provided from the files of the Michigan Census of Population and Unemployment; the census, taken in 1935, was conducted and completed by the State Emergency Welfare Relief Commission of Michigan with the assistance and cooperation of the State Emergency Relief Administration of Michigan, the Federal Emergency Relief Administration, and the Division of Social Research of the Works Progress Administration.

inspector in an auto factory in Detroit, became unemployed in September 1931 and returned to Calumet, to remain unemployed and dependent on savings throughout the remainder of the period.

CASE 2.- This is the case of a copper miner in Calumet who had had work at his trade throughout the enumeration period. Of three sons, the youngest, aged 18, was in school at the time of enumeration. The eldest, aged 22, had been in school until April 1931. He was unemployed and dependent from May 1931 to March 1934; from April to June 1934 he had work as a nickel plater in a Detroit auto factory. He returned to Calumet and unemployed dependency in July 1934 and had not found work up to the date of enumeration. The second son, aged 20, had left school in May 1933 but did not obtain work until June 1934, when he was employed for a month or two as a wood cutter in a lumber mill at home. This employment ceased in August of the same year, and he has been unemployed and dependent on the father since that time.

CASE 3.- This case is that of a composite family consisting of a young man of 27, his wife aged 29, a daughter of 2 years, a stepbrother aged 37, and a grandmother aged 74. In 1930 the grandmother was on relief in Calumet; the stepbrother was unemployed and dependent on the grandmother. He has not had employment throughout the 5-year period studied, but is listed as an unemployed gainful worker seeking reemployment. The wife has never been away from Calumet. The husband was an assembler in an auto factory in Detroit in April 1930, this work lasting until March 1931. From May 1931 to March 1934 he was a truck driver on a road-construction job in the township of Calumet; from April 1934 to the present he has been a truck driver on road construction for the Federal Emergency Relief Administration.

CASE 4.- In this case the man had had a skilled job in connection with the copper mines. He had had country road work for a time and then had taken a job in an auto factory in Detroit for a year, in 1933 and 1934. He was back in Calumet on road construction work from September 1934 to the spring of 1935. The wife and the child of 3 years remained in Calumet. (The investigator comments, "Cases similar to this are common.")

CASE 5.- "This type is also a common one," says the investigator. It is that of a man, aged 38, with a wife, both

located in Detroit in April of 1930. The man had employment as a metal finisher in an auto factory. He became unemployed in September 1932 and continued to live in Detroit on savings from October to December of that year. Then he again had work as a metal finisher from January to March. There is a gap in the record here, but from June to November of 1933 he was again unemployed and living on his savings in Detroit. From December 1933 to June 1934 he was back at his job as a metal finisher, but from July 1934 to the time of the enumeration he and his wife and small daughter had been residing at Copper City, in Houghton County, again unemployed and living on savings. Information as to his reason for moving to Copper City is not given. He had had 5 years of schooling. He is now seeking work.

As may have been noted, these are histories of persons settled in the small towns of the region rather than on open-country farms. However, the reflected relationship between the area and the industrial labor market is valid for the farm population as well as for the population of abandoned towns. In a survey of the Great Lakes Cut-Over Area made by the Farm Security Administration it was found that "during 1935, 44 percent of the open-country farm families reported a supplementary occupation or were accepting temporary, part-time jobs away from the home farm."²³ Only a small percentage of these were working as farm laborers on other farms. In the majority of cases work was at unskilled labor.

It is understandable, in view of the poor land of the Cut-Over, that relatively few of the refugees either in Michigan or in the Wisconsin Cut-Over had set up their own farming units. Whatever land has any value for agricultural enterprise was already preempted, and there was no clearing of brush to open up new farms. This is an expensive and time-consuming enterprise closed to the refugee with little resources. According to findings of a survey made by Noble Clark in Wisconsin in 1932: "In township after township where the soil was good, and where agriculture was soundly established, this survey disclosed not a single city family which had moved into the township since January 1, 1930"²⁴ Clark found that

²³C. P. Loomis, Joseph J. Lister, and Dwight M. Davidson, Jr., *Standards of Living in the Great Lakes Cut-Over Area* (U. S. Dept. Agr., Farm Security Administration and Bur. Agr. Econ., Social Res. Rept. No. XIII, Sept. 1938), pp. 39-40.

²⁴Noble Clark, *Using Farm Lands for Unemployment Relief* (Univ. of Wis. Agr. Expt. Sta. Bull., mimeo., Apr. 1933), p. 1.

there was some reoccupation of abandoned farms, but even this was mostly by tenants who had been displaced elsewhere or by persons from nearby villages who were quick, in the depression, to seize the relative advantage offered by these empty houses and abandoned tracts. When city persons were on the land their farms were almost uniformly the cheapest and in the poorest regions of this generally poor area. Many of the former factory workers, machinists, laborers, carpenters, railroad-shop workers, plumbers, and sawmill workers from the nearby cities in Wisconsin and Illinois hoped for industrial "good times" which would permit their return to the city.

The great majority of the persons covered by Clark's survey "doubled up" with families they had previously left. The reversal of the farm-to-city movement had "taken place largely through the return of farm boys and girls, and young married people of farm upbringing Thousands of unemployed persons have left the city for the farm, but the great majority of these people have not set up separate farm establishments. They have moved in with families already operating farms."²⁵ Failing this, the migrants have settled in the dying towns of the region and have contributed to a growth of village populations. However, the factors reflected and the most important problems presented remain the same whether the movement has been between city and rural town or city and open country.

Southern Regions.— The poorest agricultural counties in Kentucky and West Virginia show population trends essentially similar to those of the Cut-Over in Michigan, except that the loss in numbers prior to 1929 was much less severe. The increases since 1929 have, however, been pronounced. The relative stability in predepression years was not due to lack of emigration but to the high natural increase which balanced such losses.²⁶

The more recent increases shown by the census of these areas have been, however, too great to be accounted for by the high birth rate. In West Virginia, where the increase since 1929 was 26.7 percent, this is especially true. Large numbers of people migrated to these counties from nearby industrial centers.

²⁵Clark, *What Chance Has a City Man on a Wisconsin Farm?*, p. 2.

²⁶*Supplementary Report of the Land Planning Committee to the National Resources Board*, part VI, p. 54.

In studies made by the National Research Project in Monongalia and Logan Counties, West Virginia, a number of workers from other industries were found in the coal-mining camps, both employed and unemployed. The "abandoned camps" where the dwellings were still occupied, although the local mines had closed, frequently contained persons who had sought cheap lodging there after having lost their employment in other industries.²⁷

The Appalachian area, as a whole, contains large numbers of unemployed and partly employed persons, but in many sections this is the result of the depletion of local resources in mining, lumbering, and agriculture. Such stranded populations are one of the major problems of reemployment, but they are not comprised of recent migrants to the areas they now inhabit.

As was shown in chapter III, a considerable proportion of Michigan auto workers had originated in southern sections of the United States. It is not surprising, then, that depression studies show the return of such workers to their former homes.

C. Warren Thornthwaite has pointed out that the population of Oklahoma has a high degree of mobility, but that there is a good deal of stranded labor in the State at present. He mentions Sequoyah County in the Oklahoma Ozarks as a demonstration of the fact that poor land assumes an important role as a refuge for the industrially unemployed in time of depression.²⁸ Robert T. McMillan, confirming this opinion, says that agriculture has had to accept the residual elements of the population from urban centers as well as from depleted oil and mining areas.²⁹ He mentions specific counties where former oil workers seem to have settled on the land, and says, "A less pronounced trend is the back-to-the-land movement induced by unemployment in urban centers. In 21 of 29 counties containing cities which have a population of 5,000 and over, an increase in the number of farms between 1930 and 1935 is noted."³⁰ McMillan has taken his data from the 1930 and 1935 censuses of agriculture, annual State school enumerations, information gathered in rural-relief-population studies of the Federal Emergency Relief Administration, and from personal observations.

²⁷Unpublished manuscript, prepared by Tom Tippet, in files of the National Research Project. This manuscript is based on a field survey, conducted by the Project in 1936, of employment experience of workers in West Virginia coal-mining camps.

²⁸Thornthwaite, *op. cit.*, pp. 44-5.

²⁹Robert T. McMillan, "Some Observations on Oklahoma Population Movements Since 1930," *Rural Sociology*, Vol. 1, No. 3 (Sept. 1936), p. 332.

³⁰*Ibid.*, p. 334.

He corroborates Thorathwaite in finding that the counties which sustained the greatest losses during the period 1920-30 had the largest gains since 1930. He describes the "'new' farmers" of his State as refugees from industrial insecurity and poverty. In a deplorable physical condition, unable to secure a living in towns and cities, they have retreated to the country where rent is cheaper, where wood and water are free, and where food is available by gift or by barter in return for doing odd jobs.

Indiana Poor Lands.- The Federal Civil Works Administration in 1934 initiated a number of studies designed to throw light on employment problems in rural areas. In certain cases these were published in collaboration with land-grant universities. The studies made in Indiana of conditions on the Poor Lands of that State, though geographically restricted, throw considerable light on the kind of situation to which many of the urban-rural migrants have turned in their flight from industrial unemployment. Ten townships were studied; in order to present some of the detailed findings, the report on two of these may be summarized here.

These two townships are located in the south-central part of Indiana in an area of rough topography and poor soil. Hamblen Township is about 35 miles from Indianapolis, the State capital, which has a population of 364,000. Gibson Township is about the same distance from a smaller city, New Albany, with a population of 26,000. For several decades these townships had been experiencing farm abandonment and depopulation as their people moved to the cities. From 1910 to 1930 the population of each decreased by between 30 and 40 percent. In 1930 people started coming back to the townships in relatively large numbers. By 1933, 337 persons had come to Hamblen Township and 123 to Gibson, practically all of them from industrial unemployment. The unmarried persons returned to live with friends or relatives. The others either bought up the cheap farms on which they were to live, rented them, or sought jobs as hired help. Half or more of the families arriving at each township moved into abandoned houses, and by June 1933 there were practically no abandoned houses available in either township.

Thirty-one percent of those in Hamblen and 60 percent in Gibson Township were hoping to return to the cities when industrial

conditions seemed to warrant. They were predominantly young and employable. In Hamblen Township, for example, 62 percent were under 35, and only 9 percent over 55. The investigator commented on them as follows:

The returning people were mostly industrious people with enough initiative to seek an opportunity to reduce their living costs to a minimum until better opportunities are again available³¹

What were the conditions to which these persons had come? The average annual gross income from the farms of Hamblen and Gibson Townships was \$118 and \$140, respectively. The newcomers were handicapped not only by the scarcity of even moderately productive soil but also by the lack of adequate farm equipment. The outlook for their future in the region was therefore not good. Although food and rent were relatively cheap, other costs were high. The prospect was therefore for the attempt at self-sufficient farming, an attempt at which others failed even in more prosperous times. Their adjustment can thus be expected to be but makeshift and inadequate.³²

SUMMARY

To a high degree the urban-rural migrant, in flight from the insecurity of industrial unemployment, has been forced into a situation in which there is little hope that he will be able to make an effective adjustment. In the first place he turns or returns in most instances to an agriculture which had previously demonstrated its incapacity to provide him with adequate support. In the second place he must, under the imperative of economic pressure, settle upon the poor soil adjacent to cities or return to the very region he had left, either to settle on land he or another had abandoned or to rejoin the family in which he had previously been an economic burden. He must take up again the struggle for rural subsistence he earlier had abandoned and be subjected again to the pressure which earlier had driven him toward the cities, in order that he may wait until opportunity, real or imagined, brings him again into the industrial labor market.

³¹*Economic Effects of the Back-to-Land Movement in Marginal Farming Areas of Southern Indiana* (Purdue Univ. Agr. Expt. Sta., prelim. rept., mimeo.), p. 16.

³²*Ibid.*, pp. 1-18. See also H. E. Moore and O. G. Lloyd, *The Back-to-the-Land Movement in Southern Indiana* (Purdue Univ. Agr. Expt. Sta. Bull. No. 409, Apr. 1936).

CHAPTER V

SUMMARY AND CONCLUSIONS

The foregoing chapters have shown that the farm-city and city-farm flow is a pressure-conditioned phenomenon dependent upon circumstances at both ends of the migration movement. Under the pressure of economic insecurity the surplus of labor on the farms is pushed toward the cities. If the opportunity exists there, the translation of this group into part of the industrial labor supply is successfully accomplished. To the extent that it does not so exist, to the extent that there is economic pressure in the cities, the reserve pool of unemployed in the cities is increased and from it persons are in turn pushed out of the cities to seek adjustment in the marginal and submarginal farming regions of the country.

In this complex of circumstances can be found an explanation of the changes in the gross population movements that in 1932 produced a temporary reversal of the direction of flow. Economic pressure produced a tendency for the population to seek new outlets in industrial America. At the time of the decline of immigration into the country and the post-war expansion of industrial activity, industry had place and need for some of the population that was being pushed out by agriculture.

Even in the period of industrial prosperity and expansion during the twenties, however, industry provided more or less permanent jobs for but a fraction of those who came from the land. The great majority fell into a reserve class. Under such circumstances the competition for jobs in industry was intensified, insecurity and intermittency of employment were increased, and the ability of employers to be selective in hiring was enhanced. Many of the workers were forced to return to the land permanently or periodically. With the onset of industrial depression, the possibilities for adjustment in the city were so reduced as to increase the number fleeing to the land. At the same time, the lack of opportunity in the cities reduced appreciably the number coming from the land despite the fact

that the primary compulsion to make this change, pressure conditions on the land, persisted and even increased. In the early depression years, therefore, the trend of population movement was not followed and in 1932 more people went to farms than away from them. The subsequent increase of industrial activity and opportunity in the recovery years, coupled with the development of relief facilities in the cities, served to reestablish the earlier trends; the movement to the cities was again greater than the movement from them.

The problem extends into the future. Unemployment and pressure conditions persist both on the land and in the cities. Agricultural America continues to produce a population in excess of that for which it can provide jobs. Even should its productive efficiency level off, agriculture could not during the next 25 years provide place for more than a fifth of the expected excess of births over deaths in rural regions.¹ Furthermore, its population increase is concentrated in exactly those regions where pressure is at present greatest.

But agricultural productivity may be expected to increase further. According to Goodrich and his associates, "there is nothing on the technical side of the problem to suggest much risk in the prophecy that output per worker in agriculture will increase during the next 25 years at least at the average rate of seven-tenths of one per cent a year."² Further, even if new methods are not introduced and the use of existent methods is but extended, it would appear probable that "at least 2.5 millions of the present farm population and all of the future natural increase must find nonagricultural employment if the volume of ineffective manpower on farms is not to remain above the level of 1929."³

It is thus inevitable that each year millions of the young population that agriculture is now producing will be turning to the cities which are at present already overburdened with the urban unemployed. The situation has been further complicated by the depression which added new problems as it intensified the old. In addition to the "normal" surplus of population

¹Carter Goodrich and Others, *Migration and Economic Opportunity* (Philadelphia, Pa.: University of Pennsylvania Press, 1936), pp. 407-8.

²*Ibid.*, p. 399.

³*Ibid.*, p. 400.

which agriculture will produce, there are two other depression-created problem groups: (1) the large body of persons who have already sought and not found outlets in the city and have returned to the land and (2) the large group of persons who would normally have gone to the cities but whose migration was arrested by the industrial contraction of the early thirties. The nature of the conditions under which these persons are existing at present is such that they may all be expected to be, along with the urban unemployed, in the market for whatever jobs an expansion of industrial activity may create.

The depression-accentuated migration to the land brought the unemployed city worker not to areas where he might expect to make an effective occupational adjustment but rather to regions of cheap living conditions and unfruitful soil, places where he might hope to tide over. He is, in most cases, awaiting an opportunity to return to the industrial labor market. These poor-land areas thus have become pockets of unemployment where the city worker is stranded, unable to wrest an adequate livelihood from the soil and, at present, unable to move back to the city. Although such stranded workers do not, numerically, comprise the largest item in the problem of reemployment, their future is probably the most difficult to predict. Selective factors, particularly that of age, which today play so large a part in determining employment opportunities, operate against them. For this reason the number within their ranks that can make permanent attachment to industry, or even seek employment therein, decreases as the awaited opportunities in industry fail to materialize on the scale necessary.

The problems of the delayed migrants are similar. These persons comprise a large bloc in our unemployed population, representing innumerable youths who might have gone to the cities had industrial conditions permitted but who, with the depression contraction of industrial opportunity, were forced to remain on the land. The effect of this has naturally been to intensify the pressure conditions prevalent there. Dr. Wooster has commented on the unprecedentedly heavy demand for relief from farm dwellers which developed during the depression, both because of the back-to-the-land movement and because of the failure of industry to drain off the excess of

population that then accumulated on the land.⁴ In the same vein, Warren S. Thompson has remarked:

This piling-up of population in an industry [agriculture] already burdened with an excess production and having relatively low standards of living in at least half of its homes is a very serious matter. . . . One is driven to wonder whether this excess farm population will not drag even that part of our agricultural population still maintaining reasonably good standards down to the subsistence level it occupies.⁵

It is the young people who are principally affected by this tendency, since they are the ones who would normally look to the cities for outlet. Surveys of rural youth have inquired into their own opinion of their employment prospects. Dissatisfaction and unrest are evident. Many of these young people find a little work, but often it is only part-time work, or work at home without pay, or work relief. It is their discontent which has led many to believe that, should industrial conditions permit, they will throng to the urban labor markets. Certainly the impulsion of economic necessity is present to drive them into the industrial market place. But as with those who have returned to the land, the factor of increasing age may render them less attractive to the urban employer than they might have been a few years earlier. They are apt to find that they must wait in the hiring line while younger men or women are given preference.

The nature of the conditions under which these persons connected with agriculture live and the economic pressure to which they are subjected determines their status as a reserve for industry. Some of them, those who are now growing up into a rural America which has no economic place for them, are for industry a reserve *in potentia*. Others, those who have made the transition to the cities, oscillate between employment and unemployment in the urban labor market as demand dictates, sometimes returning to the farm between periods of employment. Still a third group has become, through the continuation of adverse conditions in industry, stranded on subsistence farms.

⁴T. J. Wooster, Jr., "Rural Relief and the Back-to-the-Farm Movement," *Social Forces*, Vol. 14, No. 3 (Mar. 1936), pp. 382-8.

⁵Warren S. Thompson, "Movements of Population," *The American Journal of Sociology*, Vol. XL, No. 6 (May 1935), p. 719.

They represent a reserve for industry which will be extensively tapped, if ever, only when industrial demand for labor mounts far beyond that which can be met by the existent force plus the other reserves.

These groups together constitute a substantial proportion of those who now represent our unemployment and relief problem. All find themselves caught between the pressure conditions on the land and in the cities. They are thus an important contributing element to the relief problem among the unemployed in industry and in agriculture. The problems they raise cannot be removed without an effective program to do away with the conditions, both in industry and in agriculture, out of which their situation arises.

The steady industrialization of our society and the relationship that has developed between agriculture and industry, between our farming population and our industrial population, has transformed what had appeared as two problems into one.

APPENDIX

APPENDIX

TABLES

Table A-1.- PROPORTION OF GAINFULLY EMPLOYED PERSONS IN THE UNITED STATES HAVING AGRICULTURAL OCCUPATIONS, 1870-1930^a

Year	Number of persons with gainful occupations	Number of persons with gainful agricultural occupations	Percent of gainfully employed persons with agricultural occupations
1870	12,924,951	6,849,772	53.0
1880	17,392,099	8,584,810	49.4
1890 ^b	23,453,358	10,073,548	43.0
1900	29,073,233	10,911,998	37.5
1910	37,370,794	11,591,767	31.0
1920	42,433,535	11,448,770	27.0
1930	48,829,920	10,471,998	21.4

^a*Industrial Distribution of the Nation's Labor Force: 1870 to 1930* (U. S. Dept. Com., Bur. Census, Oct. 23, 1938), pp. 1, 3.

^bFigures for 1890 have been adjusted by Daniel Carson, of the WPA National Research Project, to include all males gainfully employed aged 16 to 19. Adjustments are preliminary.

Table A-2.- DISTRIBUTION OF FARM OWNER-OPERATORS BY AMOUNT OF NET RETURN, 1926-35^a

Net return	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Number reporting	13,475	13,859	11,851	11,805	6,228	7,437	6,383	6,855	7,626	2,939
Average size of farm (acres)	315	275	284	270	284	249	233	234	243	220
Average net return (dollars)	1,133	1,290	1,334	1,298	538	154	66	516	624	817
Percent whose return was:										
\$5,000 or more	2.29	3.19	3.12	2.94	1.03	0.27	0.07	0.64	0.81	1.12
\$3,000 to \$4,999	5.49	6.42	6.77	6.24	2.37	0.63	0.18	1.28	1.86	2.72
\$2,500 to \$2,999	3.59	3.86	4.06	4.25	1.96	0.63	0.25	0.88	1.42	1.80
\$2,000 to \$2,499	5.46	6.53	6.35	6.01	3.20	0.90	0.36	1.85	2.88	3.51
\$1,500 to \$1,999	9.05	9.58	10.35	10.35	5.38	2.14	0.97	3.28	5.15	7.08
\$1,000 to \$1,499	14.09	15.46	15.23	14.89	9.41	4.65	2.57	7.82	9.52	11.71
\$ 500 to \$ 999	22.10	22.07	22.07	22.63	17.23	14.84	9.86	19.18	20.31	22.76
\$ 0 to \$ 499	26.43	23.98	23.19	24.76	29.93	39.77	43.08	48.02	39.66	40.29
\$ 0 to -\$ 499	8.56	6.68	7.20	6.37	19.76	23.52	33.38	14.27	14.08	7.96
-\$ 500 to -\$ 999	1.69	1.28	1.04	1.01	5.54	6.87	6.00	1.83	3.02	0.78
-\$1,000 or more	1.25	0.95	0.62	0.55	4.19	5.78	3.28	0.95	1.29	0.27

^a *Agricultural Statistics, 1936* (U. S. Dept. Agr., Bur. Agr. Econ., 1936), p. 341; same, *1937* (1937), p. 395.

FARM-CITY MIGRATION

**Table A-3.- PERCENTAGE OF OWNER-OPERATED FARMS
REPORTED TO BE MORTGAGED, 1890-1930^a**

Region	1890	1900	1910	1920	1925	1930
United States	27.8	30.0	33.2	37.2	36.1	42.0
New England	27.9	33.3	34.7	37.9	33.7	43.5
Middle Atlantic	36.6	39.1	38.0	36.3	31.8	40.3
East North Central	37.1	38.5	40.5	42.6	39.5	45.8
West North Central	47.3	43.1	45.6	51.8	51.2	54.7
South Atlantic	7.3	15.9	18.6	19.4	20.8	27.0
East South Central	4.5	16.3	22.4	23.7	24.1	31.1
West South Central	4.7	17.1	30.0	35.0	35.7	40.3
Mountain	13.5	13.8	20.6	47.9	47.4	47.7
Pacific	27.9	26.9	36.5	47.7	46.0	51.8

^a*Fifteenth Census of the United States: 1930, "Agriculture"* (U. S. Dept. Com., Bur. Census), IV, 459. Figures for 1890 and 1900 refer to June 1; those for 1910, to April 15; those for 1920 and 1925, to January 1; and those for 1930, to April 1.

**Table A-4.- PERCENTAGE OF FARMS WHICH ARE TENANT OPERATED,
1880-1935^a**

Region	1880	1890	1900	1910	1920	1925	1930	1935
United States	25.6	28.4	35.3	37.0	38.1	38.6	42.4	42.1
New England	8.5	9.3	9.4	8.0	7.4	5.6	6.3	7.7
Middle Atlantic	19.2	22.1	25.3	22.3	20.7	15.8	14.7	16.2
East North Central	20.5	22.8	26.3	27.0	28.1	26.0	27.3	29.4
West North Central	20.5	24.0	29.6	30.9	34.2	37.8	39.9	42.6
South Atlantic	36.1	36.5	44.2	45.9	46.8	44.5	48.1	46.3
East South Central	36.8	36.3	48.1	50.7	49.7	50.3	55.9	54.8
West South Central	35.2	36.6	49.1	52.8	52.9	59.2	62.3	59.5
Mountain	7.4	7.1	12.2	10.7	15.4	22.2	24.4	26.6
Pacific	16.8	14.7	19.7	17.2	20.1	15.6	17.7	21.2

^a*Census of Agriculture: 1935* (U. S. Dept. Com., Bur. Census, 1937), III, 135. Figures for 1880-1900 refer to June 1; those for 1910, to April 15; those for 1920, 1925, and 1935, to January 1; and those for 1930, to April 1.

Table A-5.- GEOGRAPHIC DISTRIBUTION OF WAGE EARNERS IN THE 10 MANUFACTURING INDUSTRIES IN WHICH THE NUMBER OF WAGE EARNERS INCREASED 20,000 OR MORE BETWEEN 1919 AND 1929^a

Area	1919		1929		Increase (number), 1919-29
	Number	Percent	Number	Percent	
United States	1,882,626	100.0	2,409,113	100.0	526,487
New England	135,172	7.2	155,740	6.5	20,568
Middle Atlantic	719,252	38.2	813,429	33.7	94,177
East North Central	680,395	35.1	843,738	35.0	183,343
West North Central	96,552	5.1	119,983	5.0	23,431
South Atlantic	102,984	5.5	179,118	7.4	76,134
East South Central	38,008	2.0	76,369	3.2	38,361
West South Central	43,085	2.3	77,273	3.2	34,188
Mountain	15,082	0.8	18,606	0.8	3,524
Pacific	72,096	3.8	124,857	5.2	52,761

^aTracy E. Thompson, *Location of Manufactures, 1899-1929* (U. S. Dept. Com., Bur. Census, 1933), pp. 18-6.

Table A-6.- USUAL INDUSTRY OF FATHERS OF FURNITURE AND TEXTILE WORKERS IN HIGH POINT, NORTH CAROLINA^a

Usual industry of workers' fathers	Percentage distribution of -	
	Furniture workers	Textile workers
Total	100.0	100.0
Agriculture	68.2	39.7
Furniture	10.2	(b)
Textile	(b)	38.5
Other	21.6	21.8

^aBased on data obtained during a field survey conducted by the National Research Project in 1936. The samples were drawn from the 1928 pay rolls of two plants. This table was prepared from the schedules for the 236 furniture workers and the 353 textile workers who reported on the occupation of their fathers. It is notable that of the male workers studied, 22 percent of those in the furniture factory and 16 percent of those in the textile mill reported agricultural experience during 1926-36 or as their first or longest job held (i. e., on NRP Form #20).

^bIncluded in "Other" industries.

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