UNITED STATES DEPARTMENT OF AGRICULTURE
THE FARM SECURITY ADMINISTRATION
AND
THE BUREAU OF AGRICULTURAL ECONOMICS
COOPERATING

Influence of Drought and Depression on a Rural Community
A Case Study in Haskell County, Kansas

BY A. D. EDWARDS

SOCIAL RESEARCH REPORT NO. VII

WASHINGTON, D. C., JANUARY, 1939

In order that administrators might be supplied with needed information concerning the problems and conditions with which its program is concerned, the Resettlement Administration (absorbed September 1, 1937, by the Farm Security Administration) with the cooperation of the Bureau of Agricultural Economics conducted a number of research investigations. This is one of a series of reports on these researches. Others will be made available to administrators of programs for the welfare of rural people as rapidly as they are completed. Reports to be issued, as planned at this time, include:

I. An Analysis of Methods and Criteria Used in Selecting Families for Colonization Projects, by John B. Holt.

II. Tenure of New Agricultural Holdings in Several European Countries, by Erich Kraemer.

III. Living Conditions and Population Migration in Four Appalachian Counties, by L. S. Dodson.

IV. Social Status and Farm Tenure - Attitudes and Social Conditions of Corn Belt and Cotton Belt Farmers, by E. A. Schuler.

V. Family Selection on a Federal Reclamation Project - Tule Lake Division of the Klamath Irrigation Project, Oregon-California, by Marie Jasny.

VI. A Basis for Social Planning in Coffee County, Alabama, by Karl Shafer.

VII. Influence of Drought and Depression on a Rural Community - A Case Study in Haskell County, Kansas, by A. D. Edwards.

VIII. Disadvantaged Classes in American Agriculture, by Carl C. Taylor, Helen W. Wheeler, and E. L. Kirkpatrick.

IX. Analysis of 70,000 Rural Rehabilitation Families, by E. L. Kirkpatrick.

X. Standards of Living in Four Southern Appalachian Mountain Counties, by C. P. Loomis and L. S. Dodson.

XI. Standards of Living of the Residents of Seven Rural Resettlement Communities, by C. P. Loomis and Dwight M. Davidson, Jr.

XII. The Standard of Living of Farm and Village Families in Six South Dakota Counties, 1935, by W. F. Kumlien, C. P. Loomis, et al. (Published by the South Dakota Agricultural Experiment Station, Brookings, South Dakota.)

XIII. Standards of Living in the Great Lakes Cut-Over Area, by C. P. Loomis, Joseph J. Lister, and Dwight M. Davidson, Jr.

XIV. Standards of Living in an Indian-Mexican Village and on a Reclamation Project, by C. P. Loomis and O. E. Leonard.

XV. Standards of Living in Six Virginia Counties, by C. P. Loomis and B. L. Hummel.

XVI. Social Relationships and Institutions in an Established Rurban Community, South Holland, Illinois, by L. S. Dodson.

XVII. Migration and Mobility of Rural Population in the United States, by Conrad Taeuber and C. E. Lively.

XVIII. Social Relationships and Institutions in Seven New Rural Communities, by C. P. Loomis.

CONTENTS

FOREWORD

This study was projected upon the assumption that it would be possible to study and analyze the social effects of recurrent droughts. It was known that during the period of the early 1890's a combination of a series of droughts and a widespread economic depression caused a heavy migration from many Great Plains counties, and that a similar combination of circumstances had occasioned a like migration beginning in 1930. It was therefore decided to learn if possible what counties in the Great Plains had most nearly repeated, between 1930 and 1935, the experience of the nineties.

A detailed study of all secondary sources of information was made, and Haskell County, Kansas, together with nine other counties in the Great Plains was selected for further study before the field work began. Haskell County was selected as the sample county because it had been subject to the effects of recurrent droughts since its settlement and was a purely agricultural county and therefore not complicated by oil, mineral, or industrial developments.

The author of this report then went to Haskell County and, together with the county agent, selected that area of the county which, in their judgment, was most typical of the whole county for more detailed analysis.

The fundamental purpose of the study has been to answer, if possible, the question, what happens to the social institutions and human relationships in a community that is compelled to make drastic alterations in its farming and economic life because of drought and depression.

CARL C. TAYLOR
In Charge, Division of Farm Population and Rural Life, Bureau of Agricultural Economics; and Social Research Section, Farm Security Administration.

INFLUENCE OF DROUGHT AND DEPRESSION ON A RURAL COMMUNITY

A CASE STUDY IN HASKELL COUNTY, KANSAS

By A. D. Edwards

Introduction

Droughts are different from other types of disaster. An explosion happens in a moment; a shipwreck is a matter of hours at most; a flood may spread havoc for days or weeks; but a drought, continuing through months or years, may last indefinitely. Then, too, other types of disaster are more or less limited in scope, whereas a drought may extend over a large part of a Nation or even across national lines.

In the Great Plains, agricultural communities have been affected very directly by the cyclic character of the climate. With the occurrence of wet years, development has proceeded at a rapid pace; but during the years of scanty rainfall, adjustments have had to be made. Today both the people themselves and their institutions bear the imprint of these successive changes.

Social changes associated with drought tend to follow a definite sequence pattern. First, there is a period of disorganization, for the prolonged uncertainty deeply affects the attitudes of the people. When the crops are in danger of drying up for lack of water, a tenseness prevails everywhere, replaced presently by an apathy that continues until the destruction is complete or until rain offers a new lease on life. Such a period of disorganization, which may last for a year or two, is marked by a series of partial adaptations by the individual families; but when the drought continues through additional years, the community as a whole makes an adjustment that influences not only the existent but the future social organization and agricultural economy. On the other hand, a short dry period, ending in a year or two, requires no complete compromise and only interrupts or delays the general development. The pessimism caused by crop failure quickly changes to optimism if the prospects for the following year are good. With the end of the drought, a readjustment to more favorable weather conditions takes place, and there is likely to be a resumption of earlier trends.

A study of drought from the viewpoint of social changes accompanying such a disaster has practical significance. It suggests the need for a flexible program of community living that will permit adjustments to climatic variations. If social changes are connected with the past and future in a "cycle of linked events," a knowledge of the sequence pattern is essential for long-range planning.

In most parts of the Southern Great Plains, rainfall was extremely deficient from 1932 to 1936, and dust storms of alarming proportions became frequent. The droughts of 1934 and 1936 were particularly widespread. Hence, the need for assistance, felt throughout the Nation during these 5 years of economic stringency, was acutely urgent here. Local agencies were unable to cope with the emergency created by the combined forces of drought and depression, and the Federal Government was compelled to intervene. Thus, the necessity for more detailed knowledge concerning the people of the area and the conditioning elements in their lives came to be generally recognized.

To study the effects of drought upon an agricultural community Haskell County, Kansas, (Fig. 1) was chosen for intensive research. Primary considerations influencing this choice were the distinctively rural character of the county, the absence of any important industries to cushion the effect of the drought upon the agricultural economy, and its location in the winter-wheat area of southwestern Kansas which has been subject to recurrent dry periods. A marked loss of population occurred in the drought of 1893-97 as well as in that of 1932-36. 1/ This section was in the officially designated drought areas of 1934 and 1936, the Soil Conservation Service classified it as a district of severe wind erosion, and the Works Progress Administration in a recent study of drought intensity 2/ included it as an "area of intense drought distress."

Secondary considerations relating to an availability of data carried some weight in the selection. The files of a newspaper published in the county since 1886 are in possession of the Kansas State Historical Society at Topeka, Kansas. Decennial State censuses of agriculture and population provide data for the period 1895-1925, and the summaries of the annual reports of the local assessors for 1887-1935 are available in the biennial reports of the Kansas State Board of Agriculture.

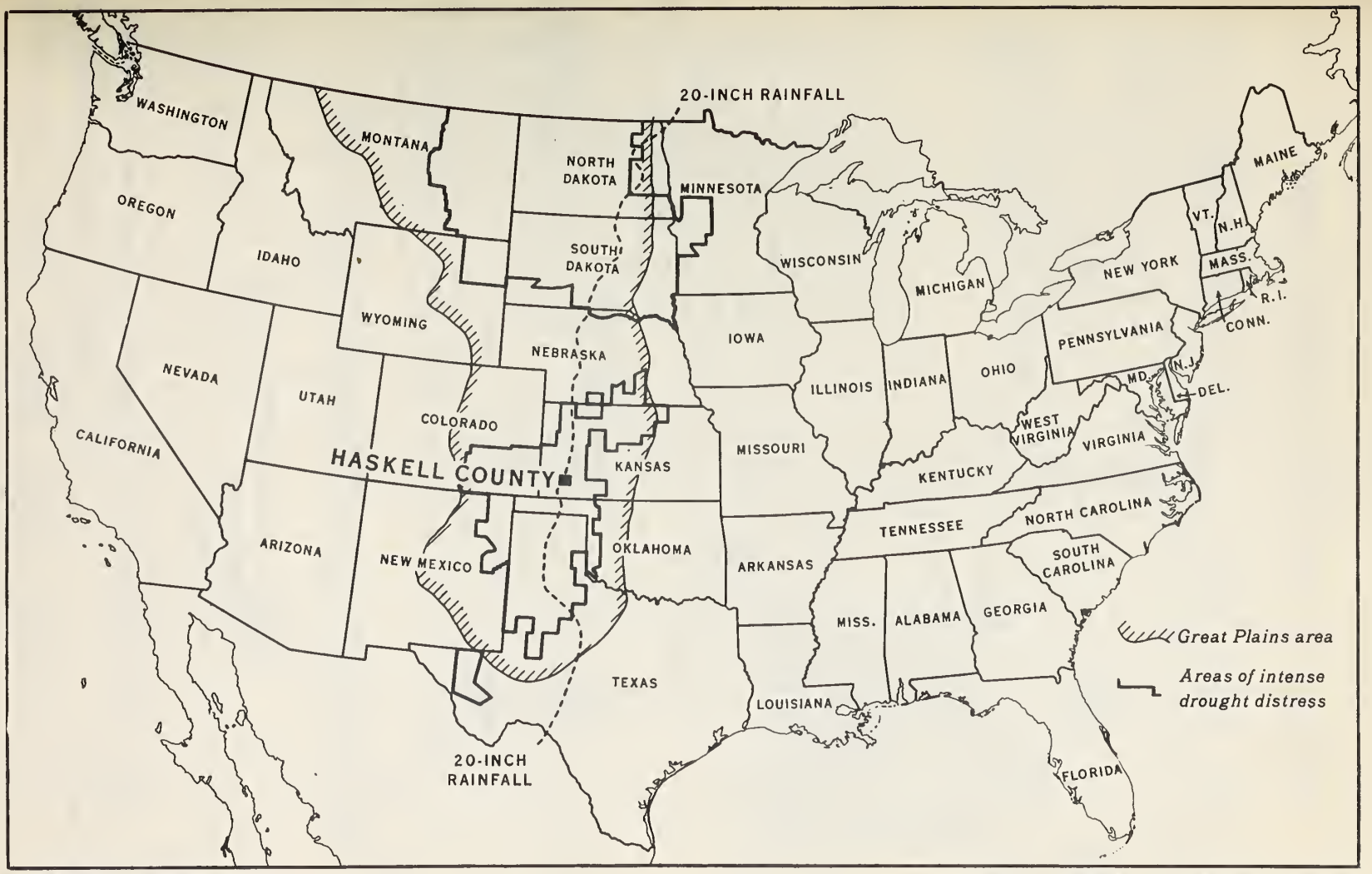
The county as a whole was taken as the unit for study, except as otherwise specified. A more intensive analysis of the residential and ownership history was confined to an area six miles square, located in the northwest part of the county (Fig. 2, p.4). 3/ Each farmer who operated any land in this area was interviewed as well as a number of farmers selected at random in other sections of the county. The information gained from the intensive study was checked against data from all available sources.

The fact that Haskell County constitutes a small unit for study made it possible to observe closely the interrelation of geographic factors with size and mobility of population, living conditions, community organization, and the attitudes and opinions of the residents.

1/ Taylor, Carl C., and Taeuber, Conrad, The People of the Drought States, Research Bulletin No. 2, Series V, Division of Social Research, Works Progress Administration, 1937, pp. 29-37.

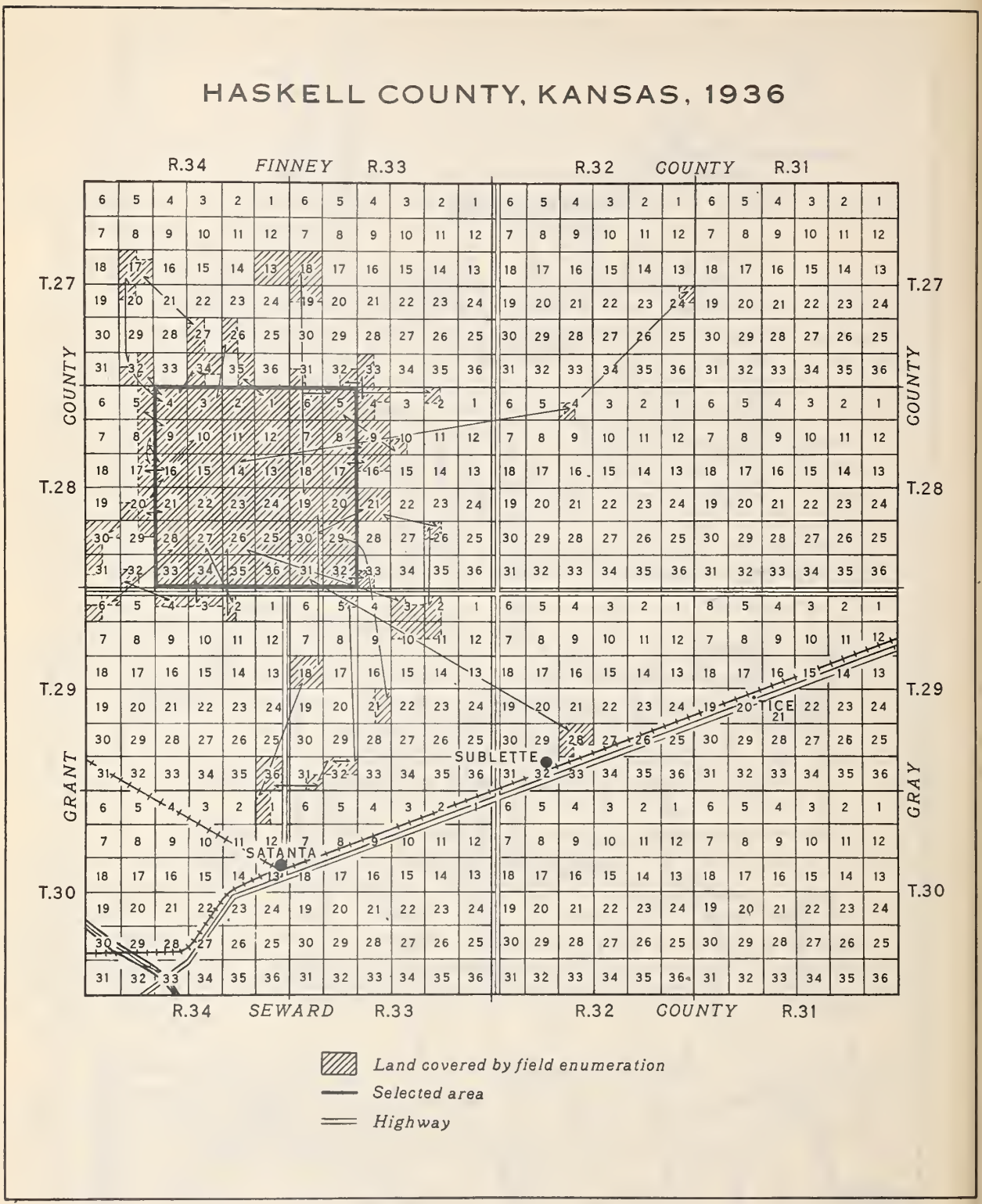
2/ Cronin, F. D., and Beers, H. W., Areas of Intense Drought Distress, Research Publication No. 1, Series V, Division of Social Research, Works Progress Administration, 1937.

3/ See Methodology.



U. S. DEPARTMENT OF AGRICULTURE NEG. 32839 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 1.- LOCATION OF HASKELL COUNTY, KANSAS, IN RELATION TO THE 20-INCH RAINFALL LINE, THE GREAT PLAINS, AND "AREAS OF INTENSE DROUGHT DISTRESS."



U. S. DEPARTMENT OF AGRICULTURE NEG. 32825 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 2.- MAP OF HASKELL COUNTY, KANSAS, SHOWING AREA SELECTED FOR INTENSIVE STUDY.

Chapter I

SUMMARY

The settlement of Haskell County was a part of the westward movement of population that reached the fringe of the Great Plains about 1870. Here, in contrast to other parts of the region, there were no cattle ranchers to be displaced, for the lack of sufficient surface water had hitherto prevented such enterprises.

The first settlers arrived in 1885 and the county was organized in July 1887. By the end of that 2-year period nearly all the public land had been occupied, dugouts and sod houses dotted the plains, and mushroom towns had sprung up in anticipation of a dense farm population.

Population

The first settlers were mainly from Illinois, Ohio, Indiana, Kentucky, Missouri, and Iowa, but a few of them came from Germany, England, and Ireland. None of the farm operators enumerated in 1895, and only four of those listed in 1905, were born in Kansas. Native Kansans comprised one-fourth of all newcomers to the county enumerated in 1915, and one-third in 1925. The present population is comparatively homogeneous except for two settlements of Mennonites, who, since the arrival of the first group in 1916, have maintained a fairly distinct cultural and social group life.

As in most pioneer communities in the Great Plains, the first settlers in Haskell County endured many hardships and privations. Water was scarce, markets were far away, and droughts, hail, hot winds, blizzards, and plagues of grasshoppers and chinch bugs were sources of constant trouble. None of the homesteaders had had experience with farming in a semiarid region and, as successive crop failures exhausted their scanty resources, many emigrated, leaving abandoned lands and ghost towns in their wake.

A highly mobile population has been characteristic of the county. It has been generally apparent that migration outward has proceeded rapidly during drought periods, but in prosperous years the emigration has been obscured by the inrush of new settlers. For instance, of the 139 farm families enumerated in the State Agricultural Census of 1895 only 40 percent were shown in 1905. Similarly, only 41 percent of those enumerated in 1920 were operating farms in 1930. Of the 461 Haskell County operators included in the United States Census of Agriculture for 1930, 200 had come to the area within the preceding 5 years. It is thus apparent that instability has been as characteristic of prosperous periods as of years of drought and depression.

The high degree of mobility and extreme fluctuations in the size of population in Haskell County cannot be considered abnormal when compared with older communities in Kansas at a corresponding stage in their

development. These, too, were characterized by a high rate of turnover during their early history.

The relatively youthful character of the present population and the high birth rate have resulted from the constant influx of new settlers in each decade. If the anticipated decrease in rate of immigration occurs, it may be expected that in the future a larger proportion of the population will be found in the older age groups and that the birth rate will decline.

Farming

Haskell County is primarily agricultural, having no important industries except those dependent more or less directly on farming. There has been a consistent attempt to farm the land more intensively, checked intermittently by the occurrence of droughts. The first attempt at small-scale agriculture ended in failure during the drought of 1893-97 and many settlers, having lost all hope, left the county. Those who remained adjusted their farming practices by depending to a greater extent on cattle raising. Soon after the return of more humid weather the large areas of vacant land were taken over by cattle ranchers, but this type of enterprise was interrupted about 1905-06 by another rush of homesteaders. Many of these new settlers left during the dry years between 1910 and 1914, but ranchers and farmers with longer experience in the county averted the most disastrous effects of the drought by adopting a type of agriculture that combined the cultivation of crops and the maintenance of at least a small herd of cattle.

Cattle raising and stock farming, though well adapted to the agricultural resources of the area, were superseded by wheat farming during the 1920's. The demand for wheat during and following the World War, the completion of the railroad through the county in 1912, the introduction of power machinery especially adapted to conditions on the Great Plains, and favorable weather - all joined to bring about a rapid development of wheat growing. By 1930 nearly all arable land had been broken out and planted in wheat.

Low prices for wheat in 1931 followed by crop failures for the years 1932-36 created a major crisis in the history of the county, and again readjustments in farming were necessary. These changes were in the direction of greater self-sufficiency and in the expansion of livestock enterprises, but they have not been so great as might have been anticipated from a drought of this severity. Federal subsidies which have enabled farmers to continue planting wheat in spite of crop failures have had a stabilizing effect.

Standards of Living

The first settlers of Haskell County lacked many comforts to which they had been accustomed in their previous homes. When they reached southwestern Kansas with their meager stores of savings, livestock,

implements, and household furniture, they had to adapt their ways of living to the exigencies of the frontier life. The self-sufficiency of their agricultural economy could provide them with only the barest necessities but they endured the dugouts or sod houses and the other hardships of pioneer life because of their eagerness to obtain the free land.

Improvements in standards of living occurred during periods of favorable rainfall but were interrupted from time to time when, owing to crop failure, the cash income that the farmers had expected did not materialize. As there was little opportunity to supplement the farm incomes - and stiff competition for the small amount of work that was available - much suffering occurred during such periods. With the return of more favorable weather, however, there was an increase in incomes and a gradual rise in living standards, resulting in more comfortable houses and the gradual introduction of modern conveniences.

On nearly every farm the trouble occasioned by scarcity of water during the early days was partially overcome by a windmill that supplied water for the household, stock, and perhaps a small garden. The isolation gradually disappeared with the introduction of telephones, the construction of a railroad through the county, and the popular use of automobiles and radios. The most rapid rise in family-living budgets occurred between 1920 and 1930, a period of great prosperity accompanying the development of wheat farming.

The urgent need for assistance, created by the low prices for wheat in 1931 and the succeeding drought, was met by large Federal expenditures in the form of benefit payments made by the Agricultural Adjustment Administration, farm loans, and relief grants. As compared with normal family budgets, expenditures for living during 1936 were only moderately reduced, the greatest curtailment of expenditures being made for clothing, advancement, incidentals, and food. Federal subsidies have directly or indirectly comprised a major source of cash income for nearly all families in the county since 1933 and have been chiefly responsible for the fact that most of the residents have been able to remain there without suffering greatly from lack of food and clothing.

Community Organization

The pattern of early settlement in Haskell County was that of family farms surrounding small villages. Isolated farmsteads developed at first because of the provision of the settlement laws which required dwellings on each homestead of 160 acres. Speculation in land values was common, particularly in the villages, but land booms were shattered by recurring droughts and speculators left the county almost over night. The county seat was reduced from a thriving village to a single store and a few dwellings, while in the open country the depopulation of large areas in the county completely obliterated the small country stores that had served as post offices and trading centers during the early settlement.

The settlers tended to idealize the patterns of social life familiar to them in other communities and strove to duplicate them in the new environment. During periods of prosperity they made great progress in acquiring both the forms and the material elements of the social organization to which they had been previously accustomed, but droughts had a retarding effect. The recent Federal assistance has helped to stabilize existing forms of social organization and to stimulate new ones in rural areas.

Public Relief Policies

Assistance from public funds is not new in Haskell County, for it has been given from time to time to relieve distress. During both the recent and previous droughts such aid has been available to citizens not only through direct relief but through other means as well. Benefit payments of recent years have their counterpart in payments made in 1889 when farmers were compensated for plowing their own land and all section lines were purchased as roads. In each case, the primary object was to assist farmers in a way that would tend to maintain their morale.

Practically no local relief was extended during the prolonged drought of 1893-97, for the county had exhausted its credit. Thus, there was nothing to halt the rapid emigration of settlers that resulted in the depopulation of large areas and in widespread social disorganization. Subsequently, very little local relief was dispensed until 1932.

Direct Federal assistance to farmers was first given during the drought of 1918-19, but it was not until 1933 that direct aid was extended on a large scale. In Haskell County, as throughout the rest of the Great Plains Area, the program of most importance to farmers has been that of the Agricultural Adjustment Administration. In 1936 about 90 percent of all farm operators in the county received benefit payments. Loans to farmers by the Farm Credit and Resettlement Administrations,4/ and projects of the Works Progress Administration and National Youth Administration have also made larger contributions to the welfare of the people throughout the drought region than to those in most other rural areas.

Attitudes and Opinions

An element of the frontier spirit remains as a factor in the community life of Haskell County. As a rule, the persons attracted to the county have been of an adventurous type. This characteristic has been reflected not so much in their attitude toward society - although there has been some tendency to individual action in the settlement of disputes - but rather in their ability to adapt themselves to experimental changes. Throughout the history of the county they have made the adjustments that

---

4/ The Resettlement Administration was succeeded by the Farm Security Administration, September 1, 1937.

were necessary to survival. The recurrent droughts that have disrupted the economy of the area from time to time have prevented the stabilization of customs and conventions.

The Federal farm program, though running counter to the individualistic propensities of farmers, was readily accepted by nearly all of the operators in Haskell County. This was due partly to the desperate circumstances in which the farmers found themselves in 1933. With the return of more favorable weather conditions some reversal of sentiment is to be expected. Education, combined with a flexible program of land use, appears to be necessary in the future if the cooperation of these farmers is to be retained.

Chapter II

THE PEOPLE

The westward rush of settlement reached Haskell County in 1885, settlers coming mainly from localities where the price of land was relatively high and ownership difficult to attain. The earliest arrivals found the climate at first to be much the same as that to which they were accustomed. But they had had no experience with farming in a semiarid country, and when the dry years came, many were forced to leave. Succeeding periods of more favorable weather brought new settlers to the county.

The cyclic occurrence of humid and dry periods has been the most important factor in determining size of population. Immigration is accelerated during humid periods, and emigration, contrary to popular belief, also increases, particularly after land values have risen somewhat. During dry periods immigration tends to stop while emigration, at least in the earlier stages of such periods, continues at a rapid rate. Owing to Federal assistance, there was less emigration than might have been expected, judging from the severity of prevailing conditions, during the recent drought of 1932-36.

The large proportion of newcomers has been an important factor in maintaining a high rate of turnover during the entire history of the county. But the rate is not abnormal when comparisons are drawn with other areas that have been as recently settled or with older communities at a corresponding stage in their development.

As most of the immigrants are young or middle-aged, the high rate of turnover and the rapid rate of natural increase in population have tended to keep the population youthful, and this, in turn, helps to keep the birth rate high.

The size of population is also closely associated with the type of farming, large-scale wheat farming being intermediate between small-scale agriculture and cattle ranching in the number of people that it will support.

Source of Population

Haskell County received its first settlers mainly from middle western States, but a small sprinkling of foreign immigrants came from Germany, England, and Ireland (Table 1). The first enumeration made in the county by the Kansas Agricultural and Population State Census of 1895 shows that none of the farm operators of that time were native Kansans; most of them were born in Illinois, Ohio, Indiana, Kentucky, Missouri, and Iowa. During the succeeding decades, these six States continued to serve as the principal source of farm operators for the county. Only four of the farmers enumerated in 1905 were born in Kansas; since then, an increasing number of the incoming settlers have been natives of the

Table 1.- Number of farm operators first enumerated in census, 1895-1925, and all operators in 1930, by State or country of birth, Haskell County, Kansas

State or country of birth	All farm operators 1930	Farm operators first enumerated, 1895-1925				
		Total	1895	1905	1915	1925
Total operators	461	594	139	73	131	251
State:						
Illinois	31	79	23	13	11	32
Ohio	13	41	19	6	8	8
Indiana	13	44	16	8	8	14
Kentucky	4	27	14	6	5	2
Missouri	55	71	13	11	17	30
Iowa	21	38	10	5	12	11
Pennsylvania	1	14	6	4	3	1
Tennessee	9	12	4	1	-	7
West Virginia	5	7	3	2	2	-
Michigan	1	10	3	3	3	1
New York	2	4	3	1	-	-
New Jersey	-	1	1	-	-	-
Wisconsin	1	2	1	-	-	1
Virginia	1	4	1	2	1	-
North Carolina	-	2	1	-	-	1
Georgia	-	2	1	1	-	-
Connecticut	-	1	1	-	-	-
Massachusetts	-	1	-	1	-	-
Colorado	3	1	-	-	-	1
Nebraska	3	5	-	1	-	4
Kansas	171	136	-	4	44	88
Arkansas	3	2	-	1	-	1
Oklahoma	18	4	-	-	-	4
Mississippi	2	2	-	-	1	1
Maryland	-	1	-	-	1	-
Texas	2	2	-	-	-	2
California	1	-	-	-	-	-
Country:						
Germany	4	19	12	1	4	2
England	-	4	2	-	2	-
Ireland	1	3	2	1	-	-
Russia	9	11	-	-	3	8
Canada	13	3	-	-	-	3
Finland	-	1	-	-	-	1
Austria	1	1	-	-	-	1
Austria-Hungary	-	1	-	-	-	1
Australia	1	-	-	-	-	-
Asia	1	-	-	-	-	-
Poland	1	-	-	-	-	-
Syria	1	-	-	-	-	-
Scotland	1	-	-	-	-	-
Africa	1	-	-	-	-	-
Unknown	67	38	3	1	8	26

Data for 1895-1925 - tabulation from Kansas State Census Schedules.
Data for 1930 - tabulation from United States Census of Population.

State. Operators born in Kansas comprised about one-fourth of all newcomers in 1915, and one-third in 1925.

As one might expect from the proximity of Missouri and Iowa, the proportion coming from these States to Kansas without intermediate stops was high, but a large proportion born in Illinois and other States also moved directly to Kansas. Of all operators in Haskell County enumerated in the State Censuses of 1895, 1905, and 1915, 417 were born in other States or in foreign countries and over one-half, or 250, of these had come directly to Kansas.5/

The population of the county is comparatively homogeneous except for two settlements of Mennonites who tend to maintain distinct cultural groups. The first of these sectarians arrived in 1916. One group emigrated from Russia to Manitoba, Canada, and finally to Haskell County, and another group came from farther east in Kansas. The Mennonites are careful farmers who practice a balanced agriculture, and have always been a desirable element in the population.

Resources of Immigrants

Most of the homesteaders during the period of early settlement were people of limited means who came in the hope of bettering their positions.

The average total value of improvements, including all buildings on a place, the breaking out of land, and the construction of a well or cistern, was estimated at $593 for homesteaders who proved up prior to 1900 as compared with $334 for preemption cases and $378 for homesteaders who commuted their entries to cash.6/ The lower value of improvements in the two latter groups can probably be attributed to the fact that those settlers who paid cash for their claims had lived on their places a minimum of 6 months and had had less time to improve their holdings before ownership than homesteaders who had fulfilled the minimum requirement of 5 years of residence.

Many of the cattle ranchers who moved to the county about 1900 had enough capital to buy large acreages of the cheap land in addition to buying cattle but the ranches varied considerably in size.

About 1904-06 the ranching economy was interrupted by a second wave of homesteaders. Most of them had only scanty resources 7/ and some of them, or their sons, were employed on neighboring ranches. Laborers who came primarily to work on ranches were also among the newcomers of the early 1900's and though they usually brought even fewer possessions

---

5/ Tabulation of data from Kansas State Census Schedules.

6/ Estimates of the value of improvements made on homesteads or preemption claims were made by settlers receiving final certificates of ownership. These data include all claims for the selected area (See Fig. 2) filed before 1900. Homestead records in the General Land Office, U. S. Department of the Interior.

7/ Homestead records, General Land Office, U.S.Department of the Interior.

than the homesteaders, many were able to secure claims for themselves while working as ranch hands. Sometimes they sold their homesteads to the ranchers after proving up; in other instances they became farmers or ranchers, retaining their original holdings and buying more land.

Although the last homesteads in Haskell County were filed on in 1909, the county, with its cheap land and relatively greater opportunities for ownership, as compared with communities farther east, continued for some time to attract people of limited means. When the advent of power machinery made possible large profits from mechanized wheat farming, many substantial farmers sought holdings in the area. Credit was relatively easy to obtain and there were numerous instances of men with small resources who became substantial farmers within a few years.

It is no longer possible for a farmer to get started with few assets besides his bare hands and a willingness to work. The easy credit of earlier years has largely disappeared and the equipment necessary for even a small-scale enterprise costs several thousand dollars. As a result, the majority of farm operators coming to the county since 1930 have been men of means. Some have acquired from one to three sections of land, bought modern equipment, and still survived the years of drought and depression.

Composition of Population

Some single persons, both men and women, filed on homesteads but the early settlers of the county were chiefly families who took up claims for the purpose of establishing homes. The proportion of males has been consistently higher than that of females, the ratio for the county varying as follows: 1890, 111 males per 100 females; 1900, 124; 1910, 131; 1920, 114; 1930, 121. Among persons 15 years of age and over the ratio of males to 100 females was 125 in 1930, but the ratio of single males to single females was 229 whereas the ratio for the State of Kansas was 140 and for the United States, 132. This relative scarcity of marriageable women in the county is characteristic of pioneer or recently settled communities.

In 1930, age groups made up of persons under 45 years old included larger percentages of the total population in Haskell County than of that in the State as a whole, while the reverse held true for the age groups composed of persons 45 years old and over (Table 2). This situation was due chiefly to the steady increase in population that occurred from 1905 to 1930. If a greater stability is achieved in the future, as may be expected, the age distribution for the county will approach that for the entire State.

As no village in the county has as many as 2,500 residents, the total population is classified as rural in the United States Census of Population. In 1930 about 42 percent, or 1,181 of the 2,805 persons reported in the Census, lived in the villages of Sublette and Satanta.

Table 2.- Age distribution of population, Haskell County and State of Kansas, 1930

Item	Total number	Percentages in each age group						
		Total	Under 5	5-14	15-24	25-34	35-44	45-64	65 and over
Total population:									
Kansas	1,880,999	100	9	20	18	15	13	18	7
Haskell County	2,805	100	13	24	19	16	14	11	3
Rural farm population:									
Kansas	704,601	100	10	23	18	13	13	18	5
Haskell County	1,752	100	14	25	19	15	14	11	2
Rural non-farm population:									
Kansas 1/	446,564	100	9	18	17	15	13	19	9
Haskell County	1,053	100	12	20	19	18	14	12	5

Fifteenth Census of the United States, 1930, Population, Vol. 3.
1/ Includes 0.1 percent unknown.

This proportion of village residents appears relatively high for an agricultural community, but it is not unusual in this area. A partial explanation is found in that about one out of seven of the farmers lives in one or the other of the villages and in that a number of the business men and local officials operate farms. As the wheat crop is raised in only a small part of the year, a village residence and other occupations are possible along with wheat farming.

Factors Associated with Size of Population

Drought

Periods of extended drought have been associated with important changes in the size and mobility of population. The immediate effect of drought is a lessened immigration while the outward movement of population continues unabated or even speeds up temporarily. Subsequently, emigration as well as immigration falls to a low level and the population remains relatively stable until some time after the dry period has ended. Thus, a severe drought has an immediate effect upon population and its consequences may be felt for many years. More favorable climatic conditions return, immigration is gradually resumed, and during the period of expansion that follows movement into and out of the locality is stimulated. This mobility may continue until the recurrence of unfavorable weather conditions.

A comparison of the size of the population of Haskell County and the amount of annual rainfall for the Western Division of Kansas for the years 1887-1935 8/ reveals a relationship between these two factors (Fig. 3). Years of more than average humidity preceded the arrival of the first settlers,9/ promising much for the future of the county, but many of these were forced to abandon their claims during the dry years of 1887 and 1889. Favorable weather the next year turned the tide of migration and population increased for about 3 years.10/ Then the drought of 1893-97 started a new exodus amounting almost to depopulation of large acreages. The population of the county declined from over 1,000 in 1893 to less than 600 in 1895, but for the following 10 years exhibited a high degree of stability considering the recency of settlement (Fig. 3).

An average rainfall of 22 inches for the years 1902-06 preceded the next rush of settlement. But when dry years and crop failures came upon Western Kansas during 1910-11 and 1913, many of the homesteaders went to seek work elsewhere and there was another decrease of population (Fig. 3). Then, in 1915 a rainfall of nearly 30 inches brought a new wave of settlement which persisted with only slight interruptions until the recent drought set in.

Deficient rainfall in 1916-17 did not greatly affect the size of population, for at that time most of the farmers depended largely upon cattle raising and there was a strong demand for farm products during these war-time years. Again, partial failures of the wheat crop during 1925 and 1927, caused by lack of sufficient rainfall in 1924 and 1926, failed to stop the influx of families attracted by the wheat boom that characterized the entire decade.

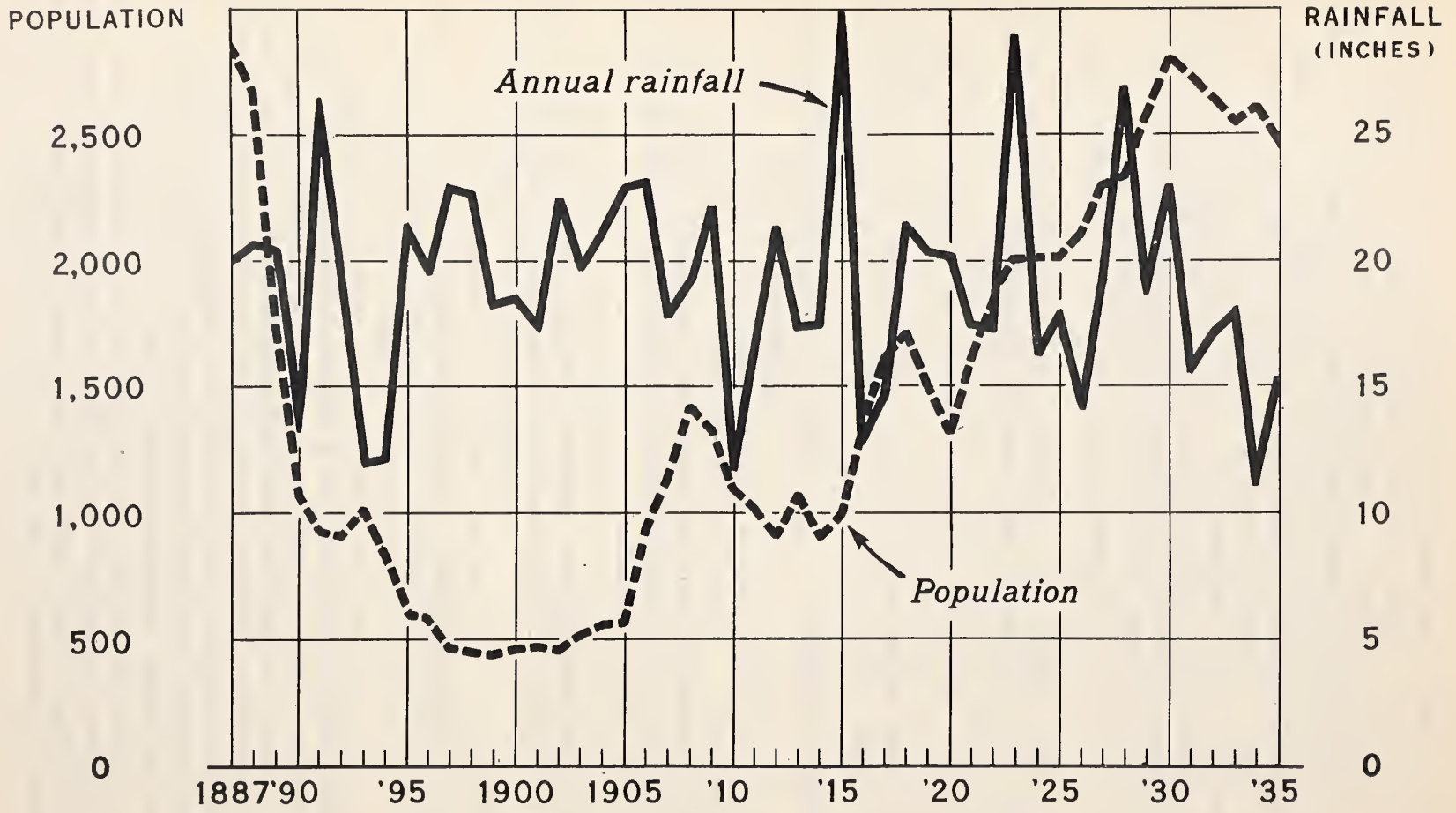
Although climatological records indicate that the most serious drought in the history of the county occurred during 1932-36, the popu-

---

8/ The rainfall for the Western Division of Kansas, as shown by the United States Weather Bureau, is used because records for a Haskell County Station (Sublette, Kansas) are available only since 1917. A comparison of the records since this date shows that the general trends of rainfall for the Western Division were the same as in Haskell County, although differences as great as 5 or 6 inches occurred during some years. As a few inches of rainfall may be the difference between failure and success of a crop, the plotted data are supplemented by other records.

9/ The rainfall of the Western Division of Kansas is not given before 1887 but an examination of the records for Dodge City, a station near Haskell County, shows that the average rainfall for the period 1881-85 was 26 inches, or about 25 percent above normal.

10/ Figure 3 shows that a good rainfall occurred in 1891 for the Western Division of Kansas, probably favoring the crops of both 1891 and 1892. Local residents report that 1890 was also a good crop year. This was possibly a local phenomenon, for the records of both the Western Kansas Division and of Dodge City indicate a rainfall much below average that year.



U. S. DEPARTMENT OF AGRICULTURE NEG. 32826 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 3.- POPULATION OF HASKELL COUNTY, KANSAS, AND ANNUAL RAINFALL FOR WESTERN DIVISION OF KANSAS, 1887-1935.

SOURCES: POPULATION DATA FROM BIENNIAL REPORTS OF THE KANSAS STATE BOARD OF AGRICULTURE
RAINFALL DATA FROM U. S. WEATHER BUREAU REPORT: CLIMATIC SUMMARY OF THE UNITED STATES. 1887-1930

lation declined only from 2,804 in 1930 to 2,549 in 1933 and to 2,465 in 1935 (Fig. 3). Contrary to what one might expect, a smaller percentage of farmers left the county during this period than during the previous 5 years (Table 3). A combination of factors served to counterbalance the tendency to emigrate. Those who wanted to sell land or equipment could get only a fraction of its worth, settlement or employment opportunities in other places were largely lacking, and the farmers thought they would be prosperous again if they could only survive these hard times. The most important element in slowing up emigration, however, was the influence of Federal assistance. 1/

Table 3.- Persistence of newcomer and old resident farm operators, Haskell County, Kansas, 1895-1935 1/

Item	Number of cases	Percentages of farm operators persisting in the county						
		1895	1905	1915	1920	1925	1930	1935
Total - 1895	139	100	40	22	14	13	8	7
Total - 1905	132		100	39	26	31	15	11
Newcomers	73		100	29	21	25	15	10
Old residents	59		100	51	32	39	15	14
Total - 1915	192			100	49	44	28	23
Newcomers	131			100	44	34	23	19
Old residents	61			100	61	67	38	31
Total - 1920	286				100	66	41	40
Newcomers	181				100	52	31	35
Old residents	105				100	90	58	49
Total - 1925	360					100	57	42
Newcomers	152					100	47	30
Old residents	208					100	64	52
Total - 1930	461						100	64
Newcomers	200						100	54
Old residents	261						100	72
Total - 1935	429							100
Newcomers	72							100
Old residents	357							100

Data for 1895 - 1920 from Kansas State Census Schedules.
Data for 1925 - 1935 from U. S. Census of Agriculture Schedules.
1/ "Old residents" are farm operators or male descendants of operators, who have been included in previous censuses as farm operators. "Newcomers" are farm operators who have begun farming in the county since the preceding census. See Methodology.

1/ Local residents estimate that the net loss of population, if they had not received Federal aid, would probably have run from 50 to 90 percent.

Type of Farming as Related to Size of Population

A close relationship has existed between the type of farming and the size of population. Although the policy of the Federal Government made free land available, it set a limitation upon the size of the individual holding and thereby necessitated the establishment of small-scale agriculture. This policy encouraged a dense settlement of Haskell County, but to a large degree defeated its own purpose by prescribing a type of agriculture utterly unsuited to conditions in the area.

The withdrawal of settlers following the onset of drought left much vacant land that was soon taken over by ranchers. A sparse population is essential for cattle ranching, for 4 to 20 sections are required for a family-size ranch. 12/ With the development of wheat farming the population increased. In Haskell County a family-size wheat farm varies from about 320 to 3,000 acres, averaging between 700 and 800 acres and allowing for a fairly dense population.

Rate of Natural Increase

The fairly high rate of natural increase in the county probably has not been important in determining the size of population up to the present, but it is a factor to be reckoned with in the future.

Data, which are available only for the years since 1917, show the average natural increase of 33 persons per year, thus accounting for a substantial portion of the net increase in population from 1917 to 1935. The birth rate showed a strong tendency to decline after 1920, but has been increasing since 1929. Because of the unusual prosperity prevalent from 1921 to 1929, it seems likely that the proportion of births occurring in hospitals outside the county was exceptionally high during those years. In 1935 the excess of births over deaths in the county was 53, the highest since the initiation of records in 1917 (Table 4). But this too is an understatement, owing to the fact that during 1935 children born to Haskell County families outside the county exceeded the number of Haskell County residents who died elsewhere. When this is taken into account, the increase amounts to 62 for 1935. The high birth rate is also evidenced by the relatively large proportion of children under 5 years of age (Table 2, p. 13). 13/

The natural increase during the next decade may be conservatively estimated at between 400 and 500 and the population will show either a substantial increase or net emigration.

12/ Youngblood, B., and Cox, A. B., An Economic Study of a Typical Ranching Area, Bull. 297, Texas Agricultural Experiment Station, July 1922, p. 126.

13/ Ratio of children under 5 per 100 females 15 to 44 years of age was 60 in Haskell County, Kansas, 40 for Kansas, and 39 for the United States in 1930, according to the U. S. Census of Population.

Table 4.- Births and deaths for Haskell County, Kansas, 1917-1935

Year	Births	Deaths	Excess of births over deaths	Population of county
Total	852	221	631	
1935 1/	75	22	53	2,465
1934	60	17	43	2,613
1933	47	16	31	2,549
1932	43	22	21	2,635
1931	56	14	42	2,723
1930	62	23	39	2,804
1929	40	8	32	2,581
1928	47	4	43	2,344
1927	27	7	20	2,297
1926	37	10	27	2,119
1925	36	5	31	2,026
1924	26	8	18	2,017
1923	22	5	17	2,009
1922	29	-	29	1,858
1921	25	12	13	1,621
1920	46	10	36	1,305 2/
1919	50	11	39	1,524
1918	57	11	46	1,720
1917	67	16	51	1,625
Average	44.8	11.6	33.2	2,149

Data on births and deaths from "Birth, Stillbirth, Infant Mortality Statistics," Bureau of the Census, U. S. Department of Commerce, 1917-35. Population data from Biennial Reports of the Kansas State Board of Agriculture.

1/ Births to residents in 1935, 87; deaths of residents, 25.

2/ The population for 1920 is low although this figure is possibly an underestimate. The U. S. Census of Population enumerated 1,455 persons.

Turnover of Farm Population

Considerable turnover of population has been characteristic of the Great Plains since its settlement. A relative stabilization with a reduced turnover might reasonably have been expected after a period of years, but nothing of the kind has occurred in Haskell County. It is possible that there has been some stabilization of population since 1930, but the time has been too short to determine whether or not this represents a permanent trend. With the farm operators enumerated in 1895 as a base, 40 percent are found to persist at the end of a decade.14/

14/ Persistence means that the farm operator or a male descendant is still farming in the county.

When the farm operators reported in 1905 are used as a base, 39 percent persist after 10 years, and when those for 1915, 1920, and 1925 are considered, 44, 41, and 42 percent respectively are present in the county 10 years later (Fig. 4).

The lack of any tendency toward stabilization, at least up until 1930, can be understood only in the light of the development of the county. The first census for which we have records, that of 1895, was taken at a time when the first wave of resettlement had receded, leaving only a picked few of the early settlers. These settlers showed a relatively high rate of persistence as compared with farmers in other parts of Kansas.15/ After 1905 the population continued to increase to such an extent that a large proportion of the total number of farm operators included in each census from 1905 to 1930 were newcomers (Table 3, p.17). These newcomers consistently had a lower rate of persistence than old resident farm operators and largely account for the high rate of turnover (Fig. 5).

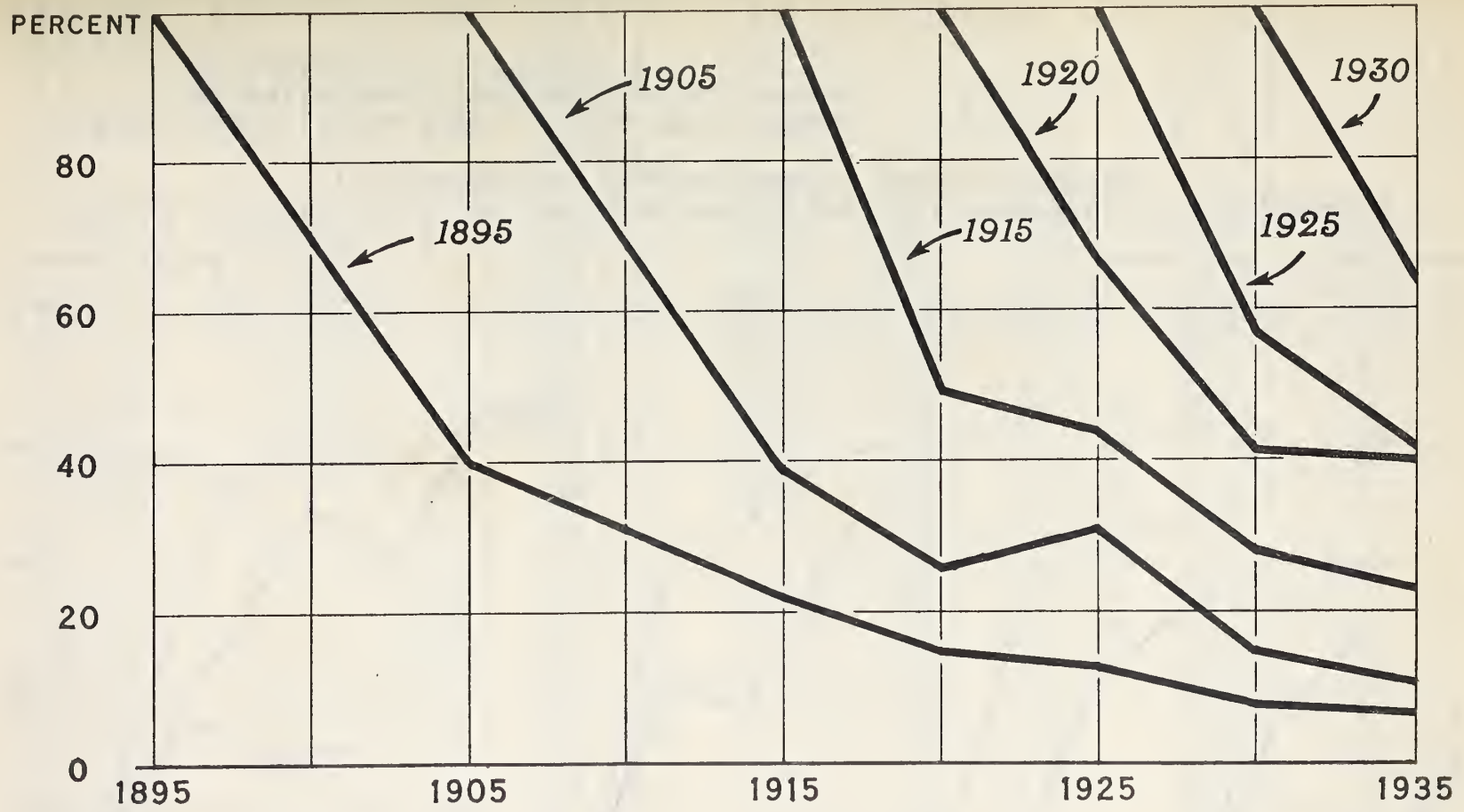
Although turnover was consistently high when measured by 10-year intervals, analysis of the data beginning in 1915 shows that there were some differences for 5-year periods. The persistence of operators was relatively high between 1920 and 1925 and between 1930 and 1935, while the period 1925-30 was characterized by considerably greater mobility. Data on this point, although not conclusive, point to the hypothesis that a highly prosperous boom period shows greater instability than periods of either drought or medium prosperity.

The relatively high rate of persistence from 1930 to 1935 was contrary to what one might expect during a severe drought. It was during this time that lack of opportunities elsewhere and large Federal subsidies within the county exerted such a powerful influence toward stabilization.

The high rate of turnover in Haskell County is sometimes cited as evidence that a drastic change should be made in the economy of the area. That some change should be effected may possibly be a valid conclusion; but if so, it rests wholly upon other considerations. The high rate of turnover prevalent in the county is not abnormal; but rather it is about what might be anticipated in any county so recently settled. The study by Malin 16/ shows that a high rate of turnover has been typical of the early history of each of the five "regions" in Kansas; in other words, it is not particularly unusual, nor is it indicative of a pathological condition.

15/ Malin, James C., The Turnover of Farm Population in Kansas, Kansas State Historical Quarterly, Vol. IV, No. 4, Topeka, Kansas, 1935, pp. 365-69.

16/ Ibid., pp. 339-332.



U. S. DEPARTMENT OF AGRICULTURE NEG. 32827 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 4.- PERSISTENCE OF FARM FAMILIES IN HASKELL COUNTY, KANSAS, 1895-1935.

SOURCE: SPECIAL TABULATIONS: KANSAS STATE CENSUS OF AGRICULTURE, 1895-1915; U. S. CENSUS OF AGRICULTURE, 1925-35

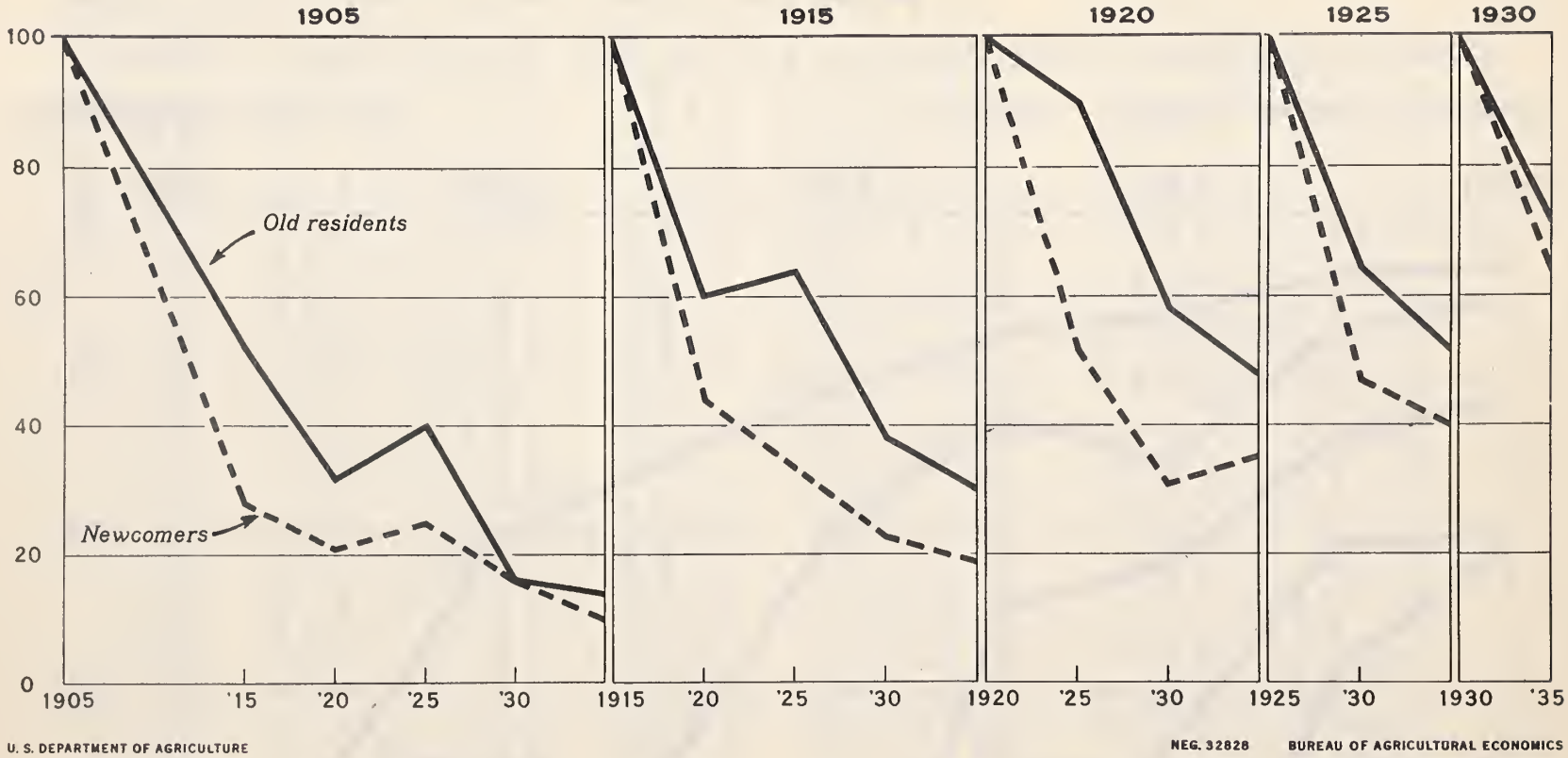


FIGURE 5.- PERSISTENCE OF NEWCOMER AND OLD RESIDENT FARM OPERATORS ENUMERATED IN EACH CENSUS, HASKELL COUNTY, KANSAS, 1905-35.

SOURCE: SPECIAL TABULATIONS: KANSAS STATE CENSUS OF AGRICULTURE, 1895-1915; U. S. CENSUS OF AGRICULTURE, 1925-35

Although the present farm population of Haskell County has been selected from incoming settlers over a long period, it is, on the whole, of relatively recent origin. Very few of the early settlers or their descendants remain in the county. Only 15, or less than 4 percent, of the present farm operators have records of occupancy going back to 1895. A total of 74, or 17 percent, have records going back to 1915, but 211, or nearly one-half, have come to the county since 1925 (Fig. 6). The farm population today, then, is composed chiefly of persons who have been attracted to the county by the recent development of mechanized wheat farming; and for the majority of the present residents the drought of 1932-36 was a unique experience.

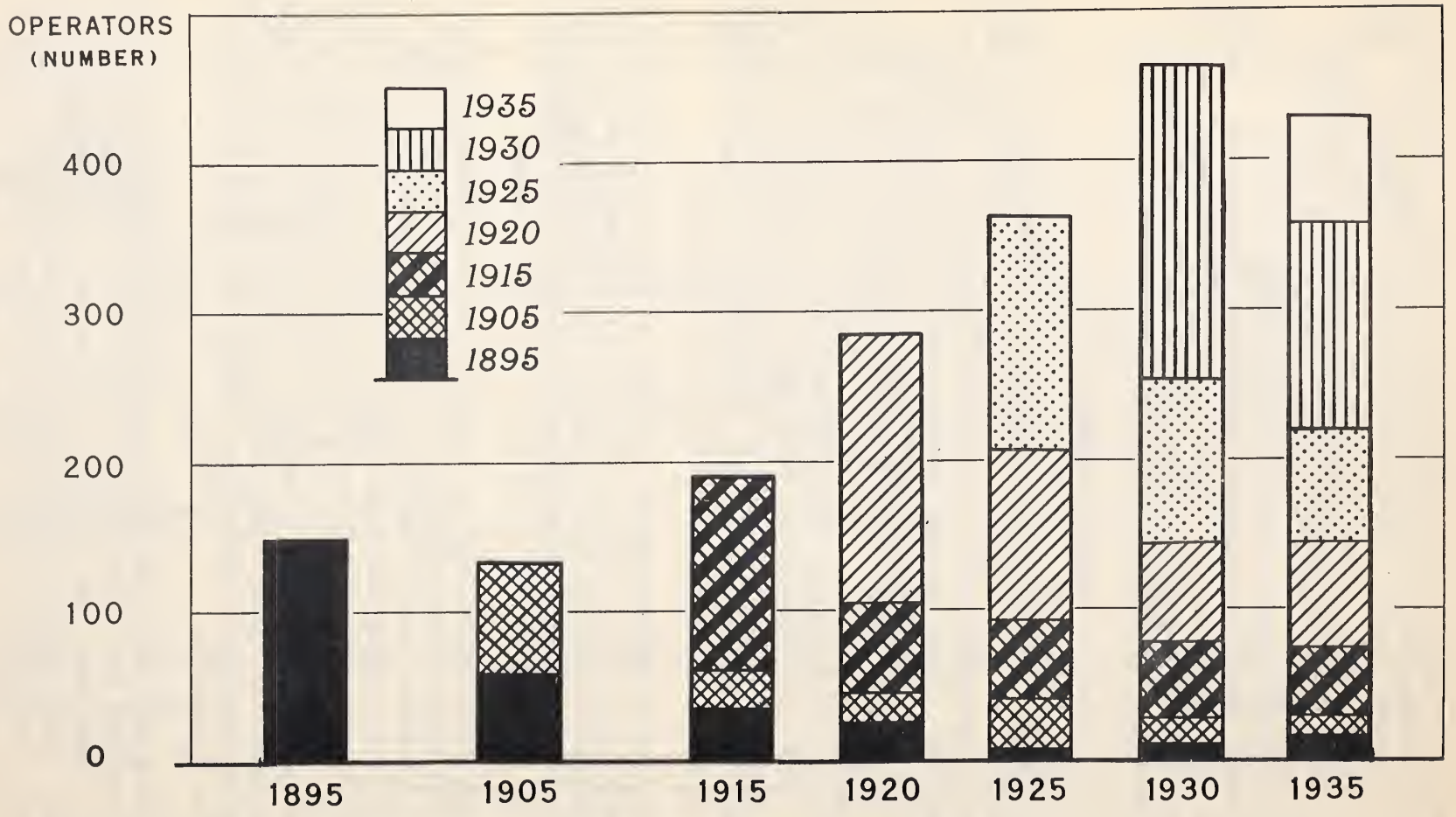
Selective Mobility

The constant turnover might be expected to have a favorable effect upon the character of the farm population if it operates to weed out the less resourceful emigrants and to select those with greater resources and more adaptability. There is some evidence that such is the case. The characteristics of persistent operators, as compared with those of operators who emigrated, differ in the several periods, but for the most part they may be summed up as follows: (1) greater resources and consistently larger farm acreages; (2) more adaptability in meeting changing conditions; and (3) tendencies toward more diversification in their enterprises (Table 5). The generally greater resources of the persistent group are found for all periods except 1925-30 when the resources of the persistent and non-persistent operators were about equal.

The ability of the persistent operators to adapt their undertakings to prevailing conditions is shown by their shift from small-scale farming to cattle raising and then to wheat farming. Their ability to change the character of their farming enterprises at a time when such a shift became profitable was probably an important factor in their success.

In 1895 those operators who remained in the county during the next decade had larger farms than those who left, and a larger proportion of them had livestock enterprises and acreages of specified crops. In 1905, the persistent group had larger herds of cattle. In 1915, a larger proportion of the persistent farm operators had cattle and raised wheat. As previously stated, there was little difference in 1925 between those who remained in the county and those who left during the next 5 years. In 1930, the persistent group exhibited a diversification of enterprises that greatly improved their chances for survival during the 1930-35 period of drought and depression.

The above data show that the more resourceful and adaptable farmers remained in the area and suggest that the turnover of farm population had a beneficial effect upon its character. There are other considerations, however, which tend to counterbalance these beneficial results. It cannot be overlooked, for instance, that some of the operators who left were apparently very successful and were also esteemed by their neighbors, as



U. S. DEPARTMENT OF AGRICULTURE NEG. 32829 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 6.- FARM OPERATORS BY YEAR FIRST RECORDED IN HASKELL COUNTY, KANSAS, 1895-1935.

SOURCE: SPECIAL TABULATIONS: KANSAS STATE CENSUS OF AGRICULTURE, 1895-1915; U. S. CENSUS OF AGRICULTURE, 1925-35

Table 5.- Percentages of persistent and non-persistent operators 1/ reporting specified items, and averages for those reporting, by years reported, Haskell County, Kansas, 1895-1930

Operators reporting, by years	Number of operators	Average size of farm in acres	Percentages reporting - Winter wheat acreage	Milk cows	Other cattle	Hogs	Poultry	Averages for those reporting - Winter wheat acreage	Milk cows	Other cattle	Hogs	Poultry
1895:												
Persistent	61	259	79	79	41	36	36	95	3	14	3	19
Non-persistent	78	213	68	63	29	29	26	84	3	11	2	16
1905:												
Persistent	59	1,656	51	66	85	57	31	58	5	84	4	43
Non-persistent	73	908	41	71	77	52	32	56	4	55	3	43
1915:												
Persistent	113	2/	54	56	66	38	2/	115	6	43	7	2/
Non-persistent	78	2/	26	40	45	24	2/	100	4	22	6	2/
1925:												
Persistent	207	717	88	77	81	64	80	239	5	23	13	122
Non-persistent	153	637	79	65	73	55	73	222	5	36	9	87
1930:												
Persistent	296	704	91	60	64	46	76	495	5	10	14	116
Non-persistent	158	607	85	37	35	28	42	413	3	16	7	74

Data for 1895-1915 - special tabulation, Kansas State Census of Agriculture.
Data for 1925-1930 - special tabulation, United States Census of Agriculture.
1/ "Persistent" operators are those who, or whose male descendants, continue to operate a farm in the county during the next intercensal period. "Non-persistent" operators are those who, or whose male descendants, are not enumerated in the next farm census. See Appendix, Methodology.
2/ Data not available.

indicated by items appearing in the local newspaper at the time of their departure. Indeed, during the highly mobile period of the wheat boom, 1920-30, no consistent differences were found with respect to resources or farming operations between those operators who remained and those who left. Apparently the county lost in those years many desirable farm operators as well as those who were less desirable; and the same is true, to some extent, for other periods. When capable farmers, who left the area after having gained valuable experience, were replaced by immigrants who came from more humid areas and were without experience in dry-land farming, the county suffered a net loss. A certain degree of mobility may be desirable, but it seems probable that the turnover in Haskell County has been somewhat too rapid to insure a selection of the most capable farmers.

These data tend to throw doubt upon any extreme generalizations that might be made as to favorable or unfavorable effects that the high rate of turnover may have upon Haskell County.

Chapter III

SIZE AND ORGANIZATION OF THE FARM UNIT

The crop and weather records of Haskell County reveal that deficient rainfall has caused a complete or partial failure of the crop for at least 24 out of 53 years, and that hail, hot winds, and insect pests have also affected production. Farming must be adjusted, then, to raising a crop about every other year, and meantime the possibility must always be kept in mind that crop failures may occur during several successive years. If irrigation is not practiced (and there seems no immediate prospect of its use on a large scale), farming of a fairly extensive type will be required to offset the effects of recurring droughts. Moreover, the advisability of adjusting farming practices to conserve moisture, control soil-blowing, and to take advantage of humid years appears to be no longer open to question.

Patterns of changes in farming during a period of deficient moisture have depended upon the length and severity of the various droughts. As the farmers generally tried to maintain their customary farm practices with only slight changes during the first year or two of scanty rainfall, droughts of short duration only retarded the trend toward a more intensive use of land, whereas those of longer duration necessitated a radical readjustment. It has been characteristic of all extended dry periods that farmers who remained in the affected area attempted to obviate the more serious consequences of the drought by raising more of their own food and by farming more extensively.

Soil and Topography

The entire region is strikingly characterized by the level nature of the country and the absence of trees. The natural vegetation is "short grass," a mixture of grama and buffalo grass. Although the surface of the ground is very flat, most of it having a grade of less than 2 percent, natural depressions such as ponds, or buffalo wallows, are scattered over the county. Occasional "draws" lend themselves to damming, and in some instances farmers have provided themselves with a supply of water by this means. The elevation of the county is about 3,000 feet above sea level.

Nearly all the soil in the county is sufficiently fertile to produce abundant crops if the weather is favorable. The top soil is mainly a dark brown clay loam with a heavy subsoil; it varies, however, to a sandy loam in the extreme northern and southern parts of the county, and there are even a few sand dunes in the northwest. Soil blowing is an ever-present menace during the spring months when high winds are preva-

lent. This danger is not confined to the light, sandy soils as it is sometimes assumed, for the clay loams of fine texture are also susceptible to erosion. The dust clouds normally subside when the spring rains come and the new crops start to grow. Although severe dust storms raged during the extended drought of 1893-97, soil-blowing has grown considerably worse during the past few years of deficient rainfall because of the large expanses of land that have been broken up. Old settlers generally agree that the earlier dust storms were not so bad as those of the past few years.

Farming practices have had much to do with the susceptibility of the soil to wind erosion. But the more capable farmers have been able to greatly alleviate the harmful effects of soil-blowing by adapting their farming practices to the climatic vagaries of this area. 17/

Climate

The average annual rainfall is about 20 inches, or barely enough to produce a crop if well distributed throughout the year. However, it is irregularly distributed throughout the 12 months and it varies from year to year. Since the settlement of the county, marked deficiencies of rainfall have occurred in 1887, 1889, 1893-97, 1899-1901, 1907-08, 1910-11, 1913, 1916-17, 1924, 1926, and 1932-36. Such a deficiency might affect crops of the year in which it occurred or its effect might not appear until the following year. During the intervening years precipitation has usually been sufficient to produce good yields. Normally, most of the rain falls in the spring and summer, but a considerable amount comes in sudden torrential downpours that result in a severe run-off. The high rate of evaporation, relative humidity, and strong winds are other factors that affect the growth of crops. In summer the days are hot and the nights are cool. The winters are generally moderate, with occasional short periods of severely cold weather. 18/ The growing season is relatively long, averaging about 170 days. 19/

17/ For a more complete discussion see Kellogg, Charles E., Soil Blowing and Dust Storms, Miscellaneous Bull.221, U. S. Department of Agriculture, 1935.

18/ The climate of Haskell County is generally similar to that of the remainder of the Southern Great Plains. The amount of annual rainfall is about average for the area, where it varies from more than 25 inches to the east of Haskell County to less than 15 inches in counties to the west. See Joel, Arthur H., Soil Conservation Reconnaissance Survey of the Southern Great Plains Wind-Erosion Area, Technical Bull. 556, U. S. Department of Agriculture, 1937, p. 5.

19/ The average length of growing season is 174 days for Dodge City (Ford County) and 169 days for Ulysses (Grant County). Climatic Summary of the United States, 1887-1930, U. S. Weather Bureau.

Small-Scale Agriculture, 1885-1900

The Farm Unit

The granting of free land under the homestead act, so effective in stimulating settlement during the early years, was intended to make it possible for each family to own its farm. The early success of this phase of the policy is indicated by the fact that only 3 of the 231 Haskell County farm operators enumerated in the United States Census of Agriculture for 1890 were tenants; the remainder were owners (Fig. 7).

The typical farm during the period of early settlement comprised 160 acres, representing a unit that the Government thought would be as adequate west of the 100th meridian as it had been in the East. Because the settlers were accustomed to farming even smaller tracts in more humid States, they did not question the wisdom of this land policy but instead they flocked to the area in large numbers, settling in the part of Haskell County selected for intensive study 20/ so rapidly that nearly all of the land was occupied within 2 years after the arrival of the first homesteaders in 1885. In 1887 this area contained 123 holdings of 160 acres each, 9 of 320 acres, and 1 of 480 acres (Fig. 8). In 1890 farms averaged 228 acres in size, and only 5 included 500 acres or more (Fig. 9).

When the unsuitability of the size of unit prescribed for this area became manifest during recurrent droughts, there was a trend toward more extensive farming. The abundance of unoccupied territory left by emigration following the dry years enabled many to use some additional land without buying any. For example, one farmer with a 160-acre place, 80 acres of which were improved, reported in the State census of 1895 a total of 205 acres in crops. Figure 10-A (p.34) shows the sparseness of settlement and the size of farm for the selected area in 1895. The practice of using vacant acreage continued until the land was claimed by its owners when the wheat boom of the 1920's so greatly augmented its value.

Adaptation of Farming to Climate

The effects of the droughts of 1887, 1889, and 1893-97 were intensified by the fact that years of heaviest planting coincided as a rule with years of light rainfall. In 1888 less than 12,000 acres of crop land were planted, but there was enough rainfall to produce an abundant harvest. Encouraged by this yield the settlers doubled their acreages the following year only to experience complete crop failures because of the extreme dryness. Crop acreage was cut down to about 14,500 acres in 1890, but an increase in precipitation resulted in a good yield. In 1891 planting was expanded and, as this was a year of heavy rainfall, the returns continued to be good. The next year a still greater acreage was

---

20/ See Methodology

brought under cultivation and a bumper crop was harvested. But the price was very low. Concerning the harvest of 1892 an earlier settler wrote:

> "This crop turned the farmers' heads and they went heavily in debt for machinery. Much of this crop, by the way, rotted in the stacks as it was not worth threshing and hauling so far to market and no more wheat was raised for so many years that they lost count. The big crop resulted in a lot of blasted hopes and busted farmers." 21/

The belief was current at that time that the climate of the area would change with increased cultivation. 22/ Agricultural successes during wet years lent credence to this fallacy and the settlers were encouraged to increase their crop acreages more rapidly than the conditions justified. The year 1893 was marked by further increases in crop acreage but as it was a year of desert-like dryness, there was a complete loss. Although the drought continued, the acreage in crops declined only slowly in 1894. After that it diminished more rapidly so when humid weather finally returned in 1898, most of the remaining settlers were planting only small acreages. 23/

During the first few years of settlement most farms had small crop acreages and some livestock. The principal crops were corn, millet, and cane. 24/ Corn, the most important of the three, produced a good yield the first year but failed thereafter. The first adaptation of the farming enterprise to the semiarid climate, therefore, was the substitution of hard winter wheat for corn as the principal crop. The Russian or "Turkey Red" hard winter wheat, a drought-resistant variety, was introduced into Kansas by Mennonite colonists in 1874 and was placed on the market about 1885 and 1886. Probably it was introduced into Haskell County about 1890 when wheat displaced corn as the main crop because farmers had learned it was more resistant to dry weather. Farmers in this year, although reducing substantially the total crop acreages as a result of the drought during the preceding 12 months, increased the acreages planted to wheat.

The first wheat crop of considerable size was grown in 1891 (Table 6,p.37), and at harvest time a horse-power thresher was used. The following year, 1892, is still spoken of by oldtimers as the best wheat year they have ever had in the county. On many fields the yield was as much as 40 bushels to the acre. The severe drought beginning the next year caused successive failures of the wheat crop, and production on a large scale was not resumed until after the World War.

21/ Supplement to the Sublette Monitor, June 12, 1930.

22/ Johnson, Willard, D., The High Plains and their Utilization, 21st Annual Report of the U. S. Geological Survey, 1899-1900, Part IV, Hydrography, pp. 686-7. The author reports similar findings with regard to the early settlement of Sherman County, Kansas.

23/ Chilcott, E. C., Dry Land Farming in the Great Plains Area, Yearbook of the U. S. Department of Agriculture, 1907, pp. 451-56.

24/ Homestead Records, General Land Office, U. S. Department of the Interior.

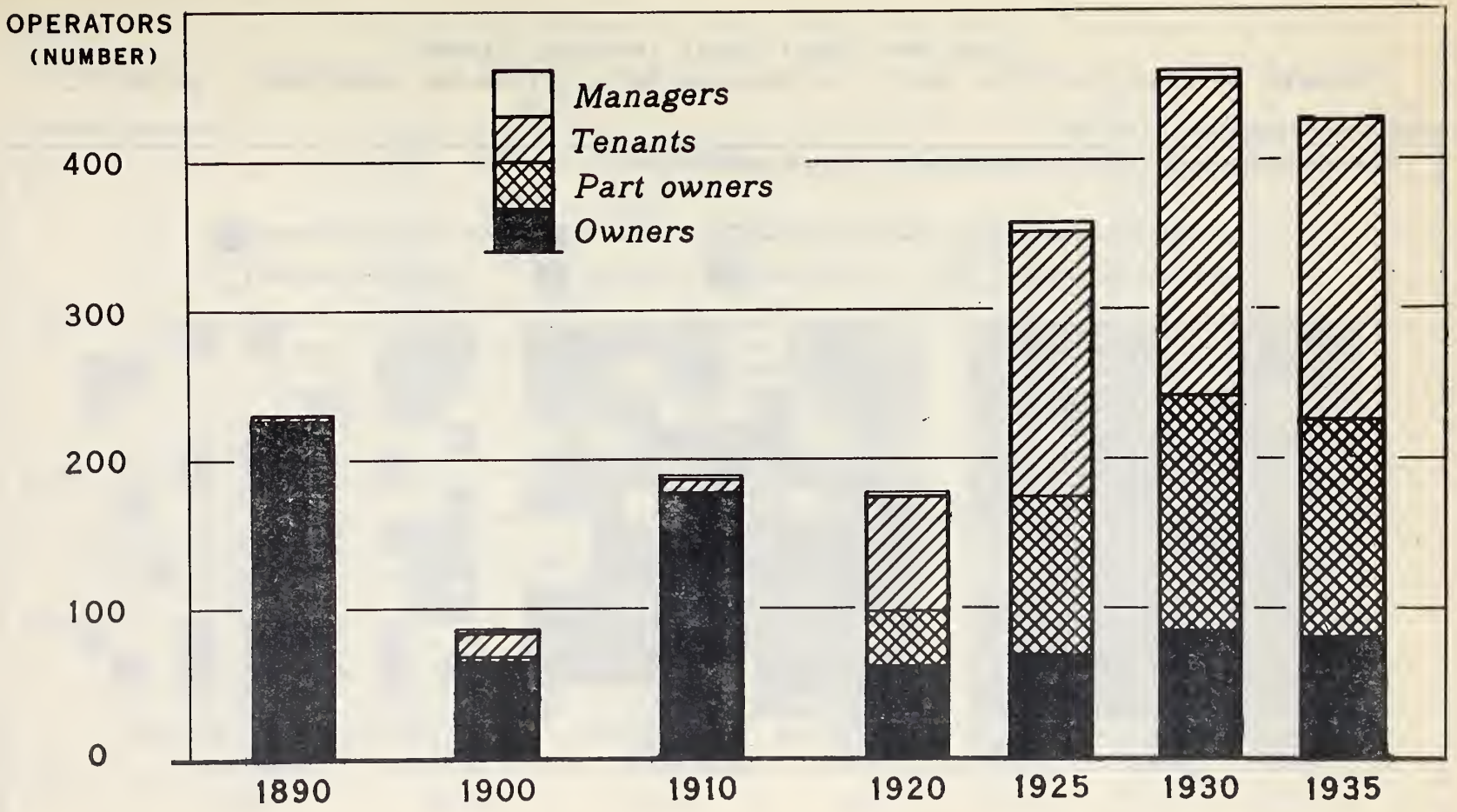
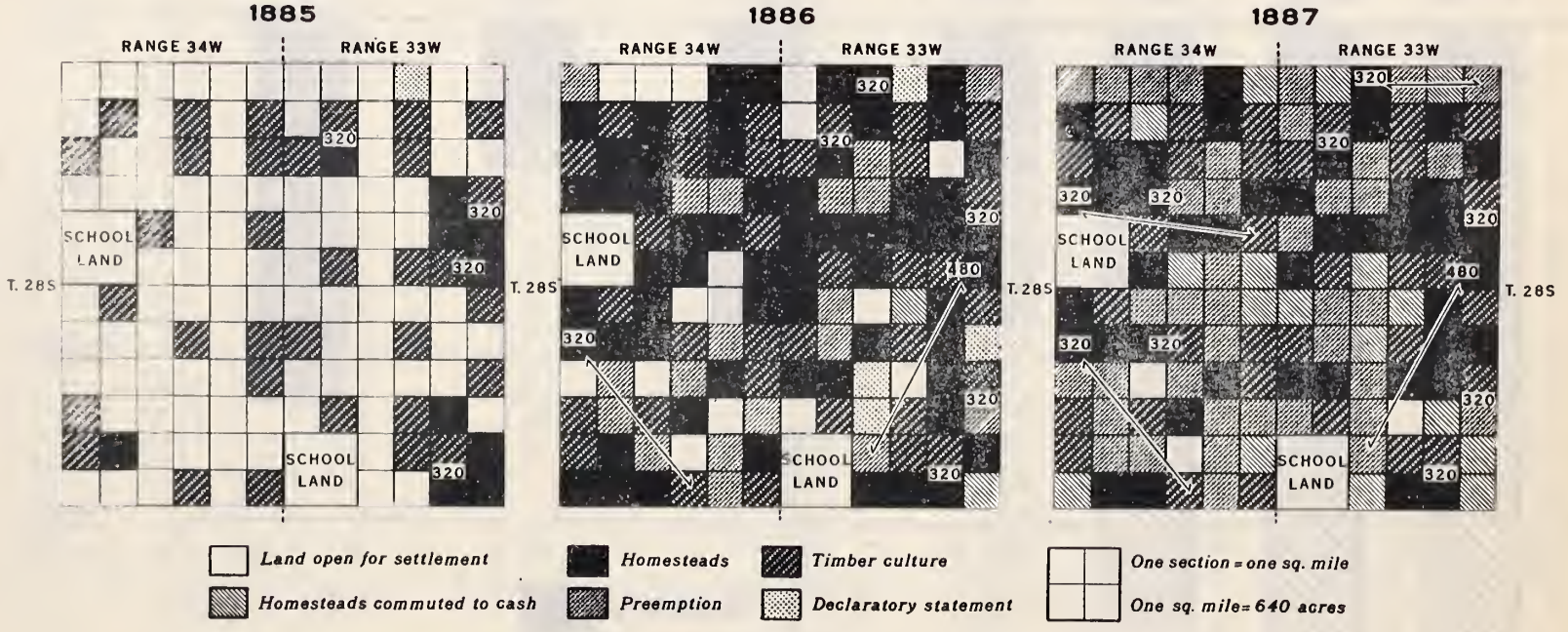


FIGURE 7.- TENURE OF FARM OPERATORS IN HASKELL COUNTY, KANSAS, 1890-1935.

SOURCE: U. S. CENSUS OF AGRICULTURE



U. S. DEPARTMENT OF AGRICULTURE NEG. 32831 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 8.- SETTLEMENT OF PUBLIC LAND BY TYPE OF CLAIM, SELECTED AREA OF HASKELL COUNTY, KANSAS, 1885, 1886, AND 1887.

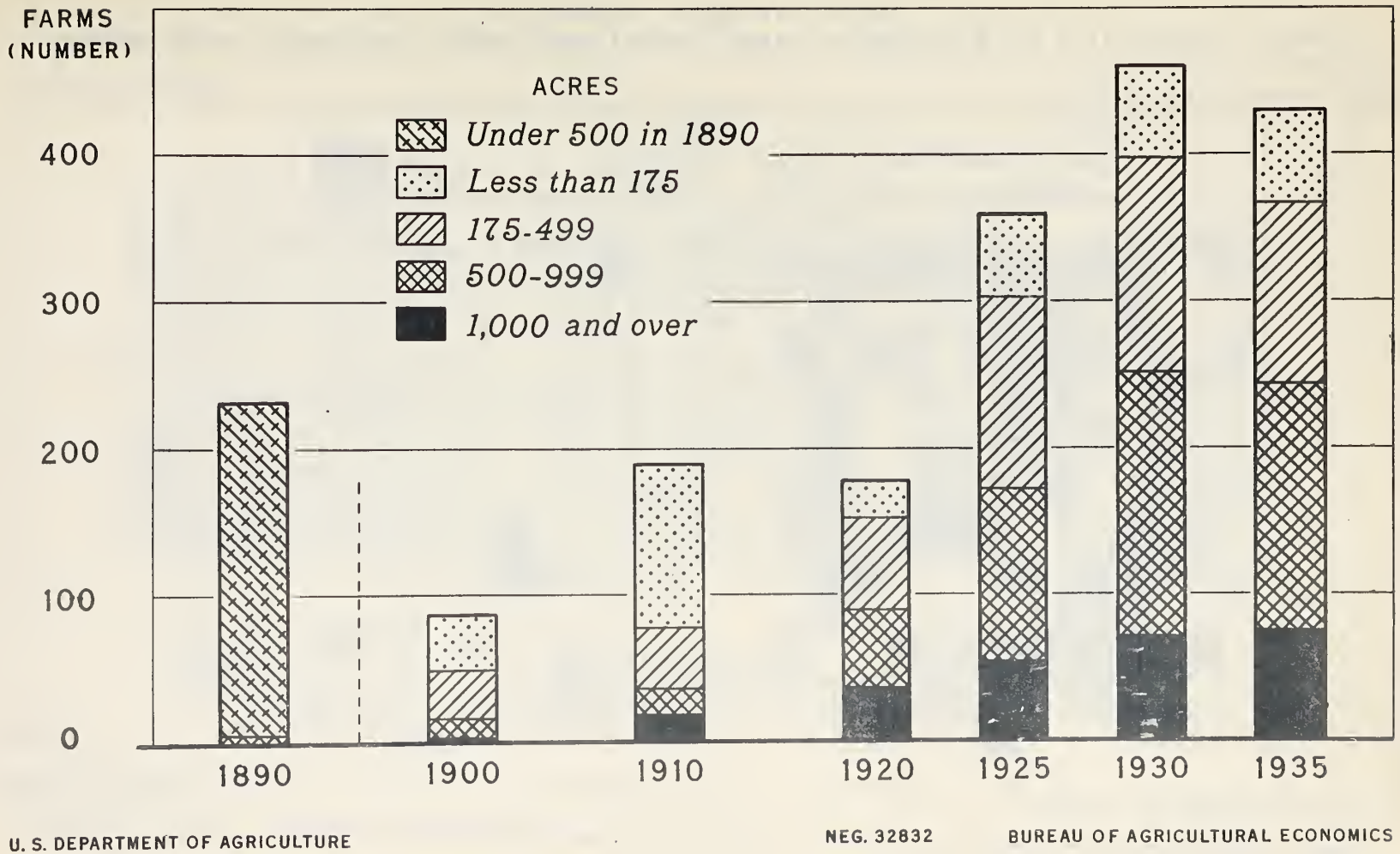


FIGURE 9.- SIZE OF FARMS IN HASKELL COUNTY, KANSAS, 1890-1935.

SOURCE: U. S. CENSUS OF AGRICULTURE

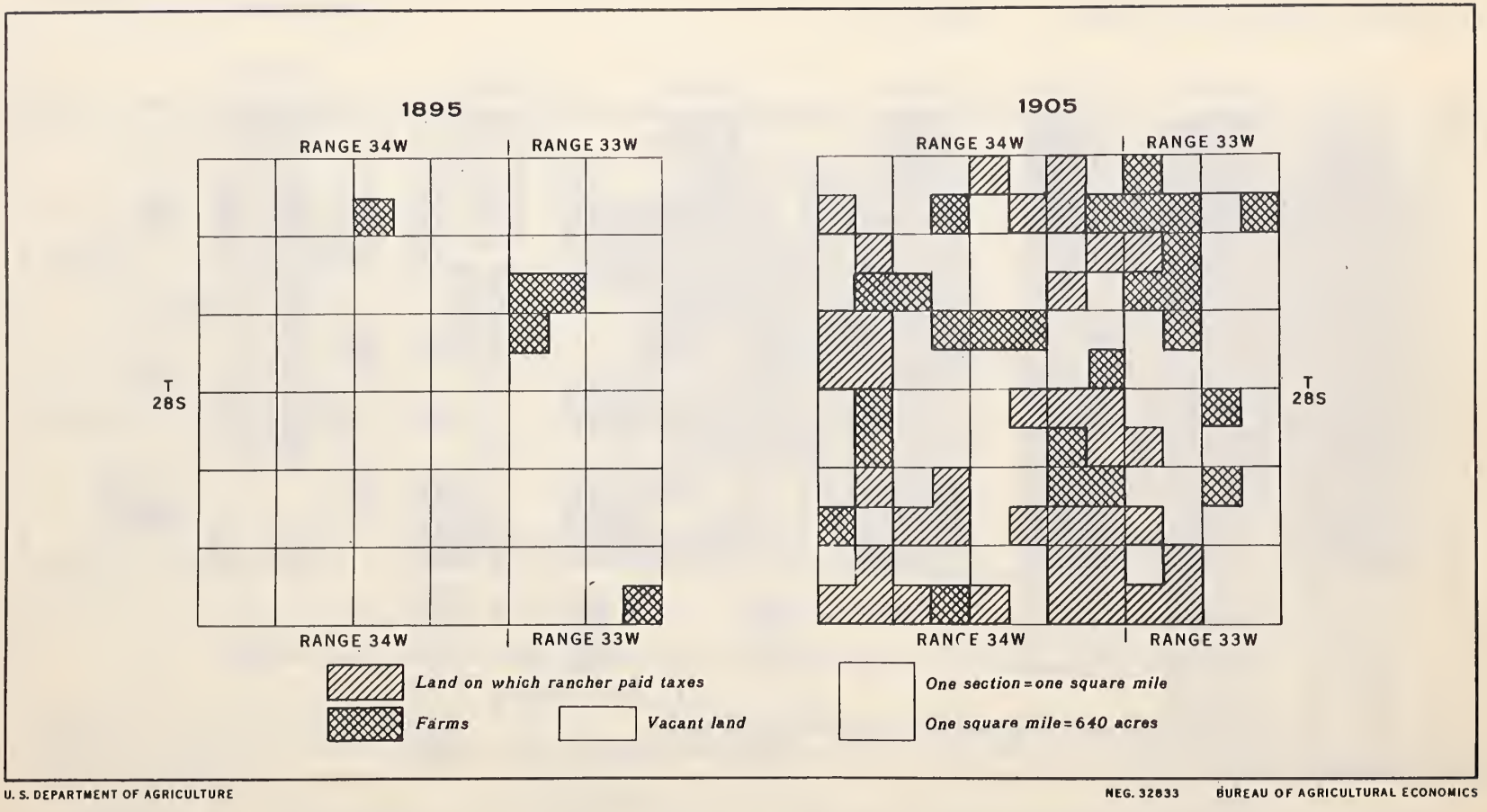
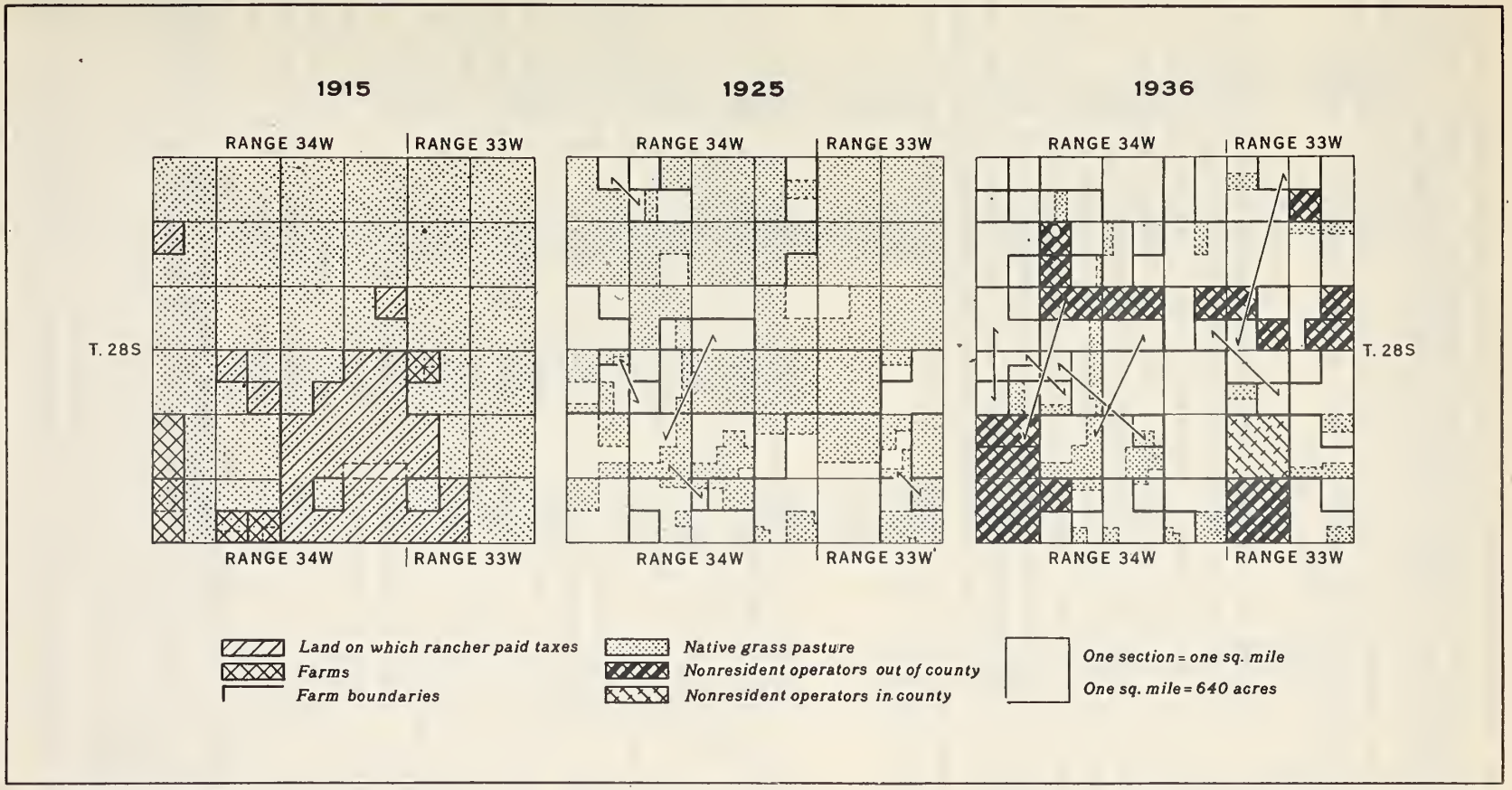


FIGURE 10-A.- RANCHES, FARMS, AND VACANT LAND IN SELECTED AREA OF HASKELL COUNTY, KANSAS, 1895 AND 1905.



U. S. DEPARTMENT OF AGRICULTURE NEG. 34056 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 10-B.- FARMS IN SELECTED AREA OF HASKELL COUNTY, KANSAS, 1915, 1925, 1936.

Sorghums, introduced into the area by the United States Department of Agriculture, 25/ constituted another adaptation of farm enterprise. These drought-resistant crops, producing feed and sometimes grain even during years of extreme dryness, are well suited to conditions in Haskell County. Sorghums commonly grown include maize, feterita, Kafir, and the saccharine varieties. Sorghums were well established as a part of local agriculture by 1895 (Table 9, p. 43).

With the cooperation of the State Experiment Stations throughout the Great Plains, a series of dry-land agricultural investigations were begun in 1905 by the Department of Agriculture. Little investigating of this subject had been done previously, and the investigations had not been coordinated. Charletans of every description employed by land-selling agencies traveled over the country, each claiming to have discovered some system that would revolutionize farming in semiarid areas.26/ Even yet no exact agricultural technique has been evolved by the coordinated efforts of the Experiment Stations and the United States Department of Agriculture, but the introduction of drought-resistant crops and certain practices designed to conserve moisture has assisted farmers in adapting their methods to this area.

Speculation

Speculation in land, which has played an important part in all the settlement of the Great Plains, had its effect on the agricultural development of Haskell County. During the early period of settlement loans were easily obtained from the mortgage companies, and farmers holding title to land could borrow as much as $500 to $600 on a quarter section. This was enough to pay for the land at the rate of $1.25 an acre and to make improvements. Most of the preemptions and homesteads commuted to cash in the selected area of Haskell County (Fig. 8, p. 32) were probably financed by such loans. Some mortgages were taken out by bona fide settlers for improving their homes, but others were taken out by speculators who intended to leave the area and wished to realize as much as possible on the land. Since the rate of interest was high and few of the borrowers could meet their obligations when payments were due, the mortgages were frequently foreclosed. Those who continued to pay interest for a while dropped their payments when the drought of 1893-97 caused land values to fall below the amount of the mortgage. Mortgage companies who obtained title to land in this way found themselves holding property that was virtually worthless. Because cash was so difficult to obtain during this period, many of the farms, whether owned by mortgage companies or individuals, were sold for taxes, and through this circumstance wealthy landowners were able to acquire large holdings at very low prices.

25/ Ball, Carleton, R., The Grain Sorghums: Immigrant Crops that Have Made Good, Yearbook of the U. S. Department of Agriculture, 1913, pp. 227-28.

26/ Chilcott, E. C., The Great Plains Agricultural Development, Yearbook of the U. S. Department of Agriculture, 1926, pp. 407-8.

Table 6.- Specified data for Haskell County, Kansas, 1887-1935

Year	Population	Inches of rainfall		Number of cattle	Winter wheat		
		Western Division	Sublette 1/	other than milk cows	Acres	Bushels	Price
1887	2,841	20.06	-	-	-	-	-
1888	2,666	20.70	-	648	184	2,024	$0.88
1889	1,725	20.49	-	1,311	2,146	21,460	.55
1890	1,061	13.19	-	963	3,619	50,666	.77
1891	924	26.35	-	1,179	12,020	132,220	.73
1892	908	18.70	-	1,261	14,584	262,512	.52
1893	1,015	11.93	-	1,053	16,745	9,042	.42
1894	831	12.19	-	579	16,645	996	.44
1895	595	21.39	-	684	9,366	28,098	.45
1896	580	19.58	-	764	9,189	27,567	.63
1897	462	22.91	-	890	3,541	35,410	.74
1898	453	22.64	-	1,766	6,511	32,705	.50
1899	434	18.26	-	3,520	1,662	9,972	.52
1900	457	18.51	-	3,261	1,889	20,779	.56
1901	463	17.34	-	4,173	3,634	21,804	.59
1902	449	22.40	-	6,915	2,084	4,168	.55
1903	504	19.78	-	8,224	2,672	37,408	.59
1904	543	21.22	-	7,457	4,437	22,185	.89
1905	558	22.94	-	7,459	3,751	59,696	.71
1906	934	23.16	-	5,862	6,298	69,278	.58
1907	1,142	17.83	-	4,918	12,535	125,350	.82
1908	1,418	19.22	-	5,317	18,999	56,997	.87
1909	1,324	22.09	-	3,975	14,053	42,159	.98
1910	1,097	11.81	-	2,504	10,320 2/	51,600	.87
1911	1,015	16.82	-	2,808	2,754	5,508	.86
1912	961	21.33	-	2,816	5,503	55,030	.80
1913	1,070	17.37	-	2,886	2,319	6,957	.78
1914	896	17.47	11.79	3,156	9,124	136,860	.93
1915	995	29.83	22.43	5,882	9,055	135,825	.97
1916	1,336	12.85	12.58	6,163	15,750	141,750	1.44
1917	1,625	14.66	16.13	7,652	1,350	4,050	2.12
1918	1,720	21.43	24.72	5,671	9,982	29,946	2.00
1919	1,524	20.33	23.60	7,037	37,543	300,344	2.14
1920	1,305	20.20	23.97	8,649	22,000	264,000	1.76
1921	1,621	17.49	21.56	6,786	51,964	779,460	1.03
1922	1,858	17.24	17.41	9,516	53,548	589,028	.94
1923	2,009	28.85	27.24	6,911	-	-	.90
1924	2,017	16.31	15.45	6,252	61,241	1,041,097	1.15
1925	2,026	17.84	22.62	5,430	73,906	295,624	1.48
1926	2,119	14.19	15.72	2,281	119,526	2,390,520	1.20
1927	2,297	19.26	20.64	2,011	80,928	323,712	1.24
1928	2,344	26.84	26.68	3,280	123,154	2,463,080	.99
1929	2,581	18.80	19.24	2,489	168,019	3,024,342	.98
1930	2,804	22.91	24.29	2,662	171,280	1,712,800	.63
1931	2,723	15.66	12.47	4,429	181,525	3,448,975	.33
1932	2,635	17.00	16.54	2,848	47,552	332,864	.33
1933	2,549	17.90	11.24	3,172	17,900	89,500	.71
1934	2,613	11.14	11.05	3,894	78,997	394,985	.84
1935	2,465	15.29	12.01	2,682	197,460 3/	189,560	.89
1936	-	18.31	12.82	-	-	-	-

Data for population, number of cattle other than milk cows, and winter wheat acreage and production from Biennial Reports of the Kansas State Board of Agrioulture.
Rainfall data from Climatic Summary of the U. S., Section 40, Western Kansas, for the years, 1887-1930, and from Climatological Data, Annual Issues, 1931-36, U. S. Department of Agriculture, Weather Bureau.
Data for prices of winter wheat from Prices of Farm Products Received by Producers, Bull. 415, U. S. Department of Agriculture, May 1927, for the years 1888-1907. Prices for the years 1908-35 are the weighted monthly average prices furnished by the Bureau of Agrioultural Economics Crop Reporting Board.
1/ Records for Sublette began in 1914.
2/ Small acreage harvested due to freezing and unfavorable conditions in preceding winter.
3/ This figure represents acres sown. The number of acres harvested was 47,390.

Ranching and Stock Farming, 1901-1915

Conditions Favoring the Development of Ranching

The relative depopulation of the county during the drought of 1893-97 left much vacant land and thus created a situation favorable for cattle ranching. The natural optimism of the frontier is reflected in the way in which the supposed ranching advantages of Haskell County were played up in contemporary news items. Thus the local editor states:

> "They [cattle] thrive the year round on buffalo grass when it is not covered with snow and stockmen seldom feed more than from two to four weeks and frequently do not have to feed at all during winter....There is an abundance of range here for ten times our present population and it is practically free. A man with plenty of pluck and grit can come here and buy 160 acres of land and ten or a dozen cows, with $600 or $700, and he is on the highroad to fortune. There are still some desirable quarters in this country subject to entry under the homestead act." 27/

Collection of taxes was extremely difficult between 1895 and 1900, and 61 of the 104 privately-owned quarter sections in the selected area reverted to the county and were sold for back taxes. Much land was sold for even less than the amount due for taxes. The Journal of the County Commissioners for 1900 shows land offered for sale by the county for $25 in county warrants 28/ per quarter section, plus the payment in cash of 1 year's taxes. School sections were leased about this time for grazing at $25 a year per section for a 5-year period. 29/ Land belonging to absentee owners could be leased for the payment of taxes or used without the permission of the owner. Government land left vacant by the departure of the homesteaders could be operated without charge although it was open for homesteading at any time. In the area selected for intensive study, 32 out of the original 136 quarter sections of public land were open for entry in 1900 and 9 were still unoccupied in 1905 (Fig. 11-A) Large acreages in parts of the county were secured by ranchers or land speculators. The extent to which the ownership of land was concentrated between 1905 and 1915 is indicated in Figures 11-A and 11-B for the selected area. Settlers who had remained in the county began to raise cattle as an important source of cash income; in fact, cattle ranching and stock farming, once established, continued to be the principal agricultural enterprises until they were superseded by wheat farming.

27/ Santa Fe Monitor, June 9, 1898.

28/ County warrants represented promissory notes of the county. Their value varied but usually was somewhat less than the face value.

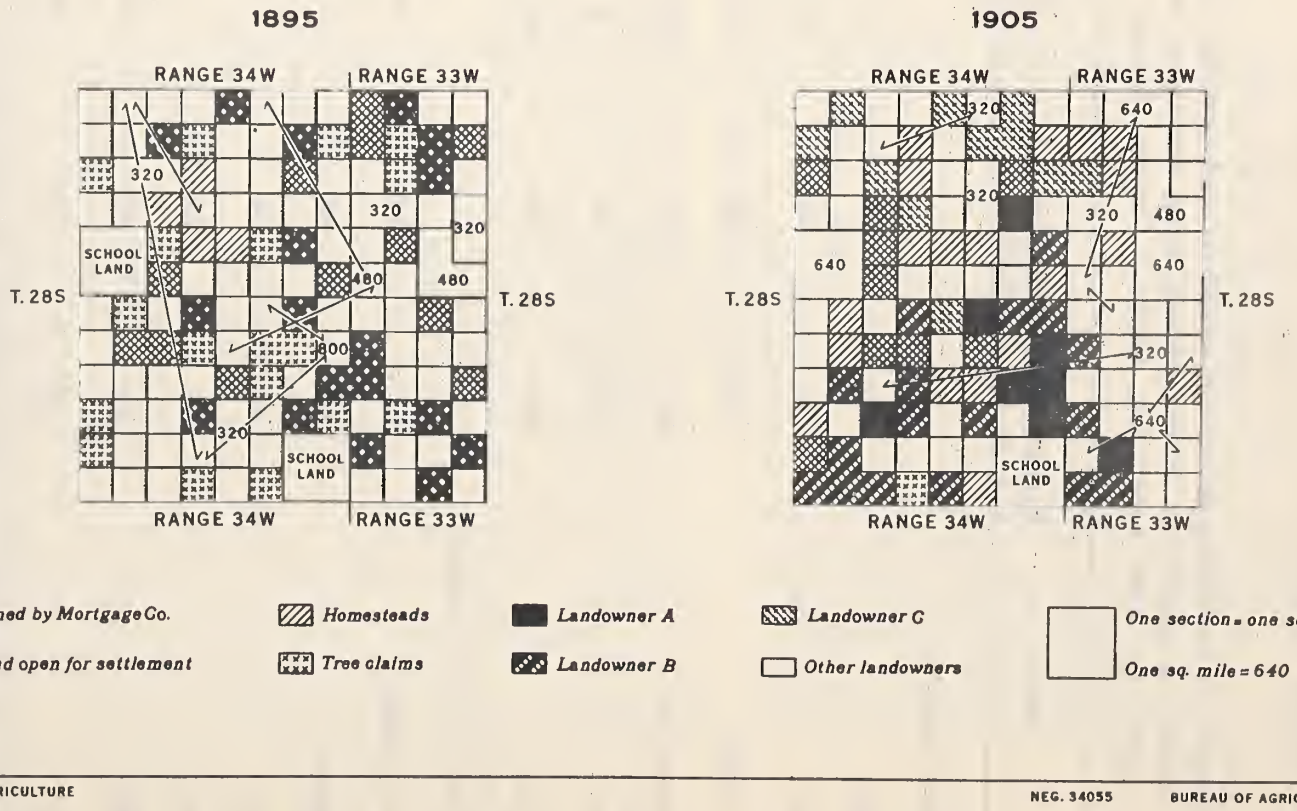
29/ Journal of the County Commissioners, Haskell County, Kansas, 1901.

Immigrants to the county between 1895 and 1905 included a considerable number who had money enough to take advantage of the abundant grazing land. By the latter year, farmers who had arrived during that decade possessed resources nearly as great as had those included in the previous census (Table 7).

Table 7.- Percentages of old resident and newcomer operators reporting specified livestock and crop acreages, and averages for those reporting, Haskell County, Kansas, 1905

Item	Percentages reporting 1/		Averages 2/	
	Old residents	Newcomers	Old residents	Newcomers
Livestock owned:				
Horses	86	90	10.7	8.4
Mules	20	15	2.9	2.5
Milk cows	78	62	5.6	3.3
Other cattle	86	75	69.3	67.3
Hogs	63	48	3.9	3.3
Poultry	46	19	$47.1 3/	$36.2 3/
Specified crop acreages:				
Winter wheat	61	33	63	46
Sorghum	83	85	33	36
Kafir	83	74	29	26
Corn	56	32	8	9
Barley	69	63	37	30
Oats	34	14	21	16

Special tabulation, Kansas State Census of Agriculture.
1/ Percentages based on 59 old resident, and 73 newcomer, operators.
2/ Average size of farm for old resident operators, 1,205 acres, and for newcomer operators, 1,263 acres.
3/ Only the value of poultry was reported.



U. S. DEPARTMENT OF AGRICULTURE

NEG. 34055 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 11-A.- OWNERSHIP OF LAND IN SELECTED AREA OF HASKELL COUNTY, KANSAS, 1895 AND 1905.

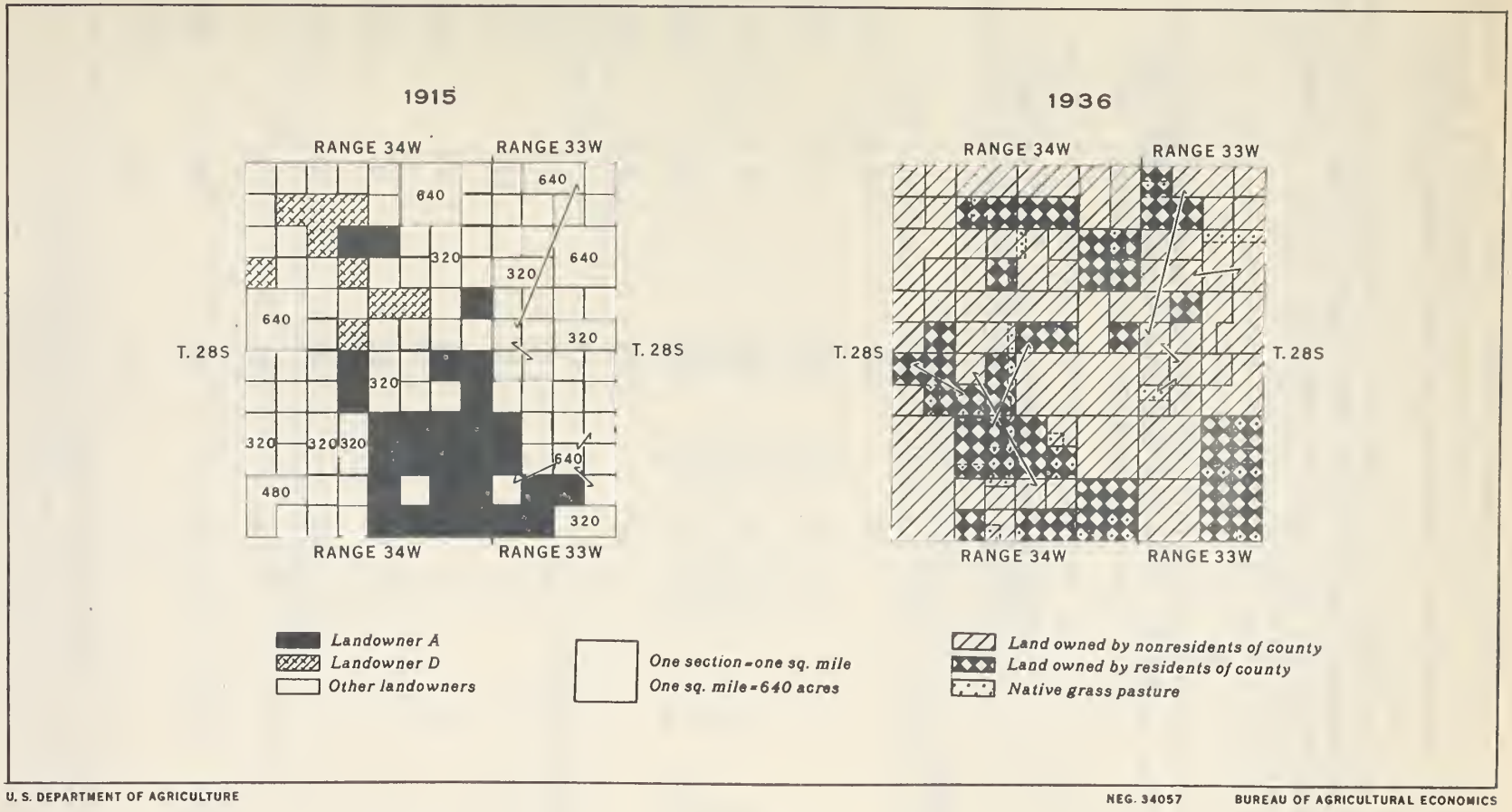


FIGURE 11-B.- OWNERSHIP OF LAND IN SELECTED AREA OF HASKELL COUNTY, KANSAS, 1915 AND 1936.

There were relatively more homesteaders than buyers during the following 10 years, and in 1915 newcomers were somewhat at a disadvantage with respect to possession of livestock and wheat acreage (Table 8).

From 1895 to 1915, the character of the immigrants tended to facilitate the changes in agriculture. The opportunities for profitable cattle raising attracted the type of immigrant suited to develop such possibilities within the area.

Table 8.- Percentages of old resident and newcomer operators reporting specified livestock and crop acreages, and averages for those reporting, Haskell County, Kansas, 1915

Item	Percentages reporting 1/:		Averages	
	Old residents	Newcomers	Old residents	Newcomers
Livestock owned:				
Horses	83	69	11.4	9.1
Mules	29	24	5.3	2.8
Milk cows	60	44	4.6	5.6
Other cattle	62	56	42.2	32.4
Hogs	37	31	8.8	5.8
Specified crop acreages:				
Winter wheat	45	41	138	100
Sorghum	55	43	27	25
Milo	58	61	27	34
Kafir	57	50	21	24
Corn	23	25	8	10
Barley	48	32	35	31
Oats	32	18	29	21

Special tabulation, Kansas State Census of Agriculture.
1/ Percentages based on 60 old resident operators (omitting one case for which the data of this table are not available) and 131 newcomer operators.

Size of Ranches and Stock Farms

The family-size unit in a permanent ranching economy ranges from 4 to 20 sections, or from 2,560 to 12,800 acres. 30/ Typical of the larger ranches in Haskell County was one of 18 sections or about 11,500 acres. The scale on which some of the ranchers operated is further indicated by the fact that at one time a train-load of cattle was shipped into the county for only two ranchers. 31/ The average size of farms and ranches recorded in the State Census of 1905 was 1,238 acres or nearly 2 sections (Table 9), the largest average acreage reported by any previous or later census. Ranching was at a peak, but many small farms and a few homesteads as well are included in this figure.

Table 9.- Percentages of farm operators reporting specified livestock and crop acreages, and averages for those reporting, Haskell County, Kansas, 1895-1915

Item	Percentages reporting 1/: 1895	1905	1915	Averages 2/: 1895	1905	1915
Livestock owned:						
Horses	79	89	73	5	9	10
Mules	27	17	26	2	3	4
Milk cows	70	74	49	3	4	5
Other cattle	35	81	58	12	64	36
Hogs	32	57	33	2	3	7
Poultry	30	35	3/	18	37	3/
Specified crop acreages:						
Winter wheat	73	51	42	89	51	113
Sorghum	78	84	48	18	35	26
Kafir	60	78	52	11	27	23
Milo	4	-	60	8	-	32
Corn	52	42	25	13	8	9
Barley	55	66	37	20	33	33
Oats	41	23	23	17	19	24
Broom corn	26	3/	3/	21	3/	3/

Special tabulation, Kansas State Census Schedules.

1/ Percentages based on 139 operators in 1895, 132 in 1905, and 191 in 1915.

2/ Average size of farm was 234 acres in 1895, 1,238 in 1905, and 620 in 1915.

3/ No data.

30/ Youngblood, B., and Cox, A. B. op cit. p. 126.

31/ Santa Fe Monitor, April 21, 1904.

Obstacles to Ranching

The second rush of settlement, centering around 1905-06, followed several humid years. The arrival of these homesteaders had much to do with the frequent consolidations of ranch holdings, for claims filed on all remaining Government land broke up the range that the ranchers had been occupying. For instance, a rancher in the selected area, while paying taxes on several disconnected tracts in 1905, ran his cattle over a considerable range but after this was broken up by incoming homesteaders, he consolidated his holdings by purchasing several additional sections (Fig. 11-A, p. 40).

Numerous disputes over damages to crops accompanied the breaking up of the range. A law was passed prohibiting cattle, horses, and other animals from running at large 32/ and ranchers frequently had to pay for damages caused by their livestock.

Prairie fires were a constant danger to settlers and ranchers from the time of the first settlement until the land was nearly all broken out in the 1920's. Fires frequently destroyed a part of the range, but because so much land was available they did not materially affect cattle ranching.

Droughts of 1910-11 and 1913

Although rainfall was deficient during 1910-11 and 1913, farmers and ranchers who depended chiefly on cattle raising were not greatly affected because of the abundance of the range. But the new homesteaders, who depended almost entirely upon farming, had great difficulty in surviving. 33/ Many of those who left to get temporary work elsewhere never returned to complete their claims; others left soon after they had proved up. A settler in western Kansas reports the following experience of his family:

> "Out from Hays at that time sod houses still squatted low on buffalo sod, among scattered patches of dwarfed and wilted corn. Hardest of all were the years, 1911, '12 and '13. For these three years with hardly a pause, the dust blew day and night. It would rain hard in the morning and the dust would blow again that afternoon. But rains were far between and light. Crops baked and were blown from the ground. The top-soil of whole counties moved north. Huts and homesteads were abandoned by the thousands as settlers treked back east." 34/

Old settlers who had lived in Haskell County during those years corroborated these statements.

32/ Santa Fe Monitor, March 5, 1895.
33/ Homestead records for selected area of Haskell County, Kansas, Government Land Office, U. S. Department of the Interior.
34/ Lord, Russell, Men of Earth, London-New York-Toronto, Longmans, Green and Company, 1931, pp. 274-75.

Development of Wheat Farming, 1916-30

Factors Favoring Shift to Wheat Farming

The trend toward the predominance of wheat farming during the period 1916-30 was brought about by a combination of factors: (1) the completion of a railroad through the county in 1912, (2) the extraordinary demand for wheat during and following the World War, (3) good prices for wheat during the entire period, (4) the introduction of power machinery, and (5) favorable weather.

A railroad had been anticipated since the first settlement of the county. Before its completion farmers had had to haul their wheat to the railroad station in Plains or Garden City, about 30 miles from the center of the county, so the cost of marketing absorbed a good part of their profits. The building of the railroad provided not only a convenient outlet for crops grown in the county, but a cheap and rapid means of transportation as well.

Wheat prices were especially high during the war when it was also considered a patriotic duty to raise as much wheat as possible. But in this part of the Great Plains unfavorable weather held back the major development until the 1920's when the introduction of power machinery coincided with favorable weather and good prices. Tractors were introduced about 1915 and combines (combined harvester-thresher), in the early 1920's. Their use increased slowly until 1924-26 when they were generally adopted by wheat farmers.

In the winter-wheat area of the Great Plains the adoption of power machinery has had far-reaching effects. 35/ Such machinery is particularly well adapted to the climate and topography of this region, for it makes possible the quick performance of all farming operations when weather conditions are favorable. This reduces somewhat the hazard in growing crops because a few days' difference in planting or harvesting may mean the difference between a good crop and none at all. Also larger areas can be cultivated with machines than with horses, and the cost of production is greatly diminished from seedbed preparation to harvesting. Moreover, the displacement of horses by machines partly eliminated the necessity of growing forage crops and the released acreage could be planted in wheat. Credit is less essential during the harvest as a combine makes it possible for the farmer to sell grain the day harvesting begins. On the other hand, large capital investment is required as the complete equipment for a wheat farm of 800 acres or less, permitting the planting and harvesting of 300 to 500 acres of wheat, costs about $5,000. Also large cash outlay is necessary to operate the equipment.

35/ Grimes, W. E., The Effect of Improved Machinery and Production Methods on the Organization of Farms in the Winter Wheat Belt, Journal of Farm Economics, 1928, Vol. 10, pp. 229-30.

The generally favorable weather conditions during this period constituted one of the most important factors in the development of wheat farming. (See Fig. 3, p. 16, for annual rainfall.) The production of winter wheat increased slowly between 1915 and 1921, but more rapidly thereafter. Although there was a rainfall deficit in 1916-17 followed by poor crops, the extraordinary demand for food during the war checked any significant decrease in the cultivated area. The production of wheat in Haskell County in 1919 was 300,000 bushels, exceeding the bumper crop of 262,000 bushels in 1892 for the first time. It increased to 779,000 bushels in 1921 and to more than 1,000,000 in 1924. The partial crop failures in 1925 and 1927 did not interfere with the boom that was then in progress. The production of wheat increased to 2⅓ million bushels in 1926, to 2½ million bushels in 1928, and passed the 3-million mark in 1929 (Table 6, p. 37). 36/

Changes in Farm Enterprise

Drastic changes in farm enterprise were especially rapid during the wheat boom when a one-crop system of farming, with its chief dependence on wheat as a cash crop, was developing. From 1915 to 1924, the proportion of farmers raising wheat was doubled and the average acreage planted in this grain rose from 113 acres to 230 acres. During this period there was a marked increase in the proportion of farmers raising livestock, particularly milk cows and hogs for home consumption. Although comparable figures for 1915 are not available, there was probably a similar increase in poultry raising. Cattle raising, a "cash-crop" enterprise, also shared in the increase but the average number of cattle per farm declined slightly. (Compare Table 9, p. 43, with Table 10.)

Still greater emphasis was put on wheat production between 1925 and 1929. The proportion of farmers planting wheat increased slightly, but on an average, operators doubled their acreage. Although the proportion, as well as the actual number, of farmers who kept livestock decreased, this phase of the farm enterprise was not abandoned. The number keeping cattle other than milk cows decreased from 77 percent in 1925 to 53 percent in 1930, and a similar decrease occurred in the percentage having milk cows, hogs, and poultry (Table 10).

Native grass pasture was broken out at a rapid rate between 1925 and 1927. As non-resident owners insisted upon having all available land planted to wheat, the demand for wheat land made it increasingly difficult for newcomers to obtain pasture or for the older resident operators to keep the land they rented from being plowed up. Owner-operators, particularly those who resided upon their farms, tended to reserve part of their land for pasture. (See 1936 map, Fig. 11-B, p. 41). The amount of land broken out increased from 25,178 acres in 1910, and 55,840 acres in 1920 to 120,280 acres in 1925 and 238,602 acres in 1930. 37/

36/ This probably represents an underestimate. See Methodology.

37/ U. S. Census of Agriculture. Figures quoted are classified as improved acreage in 1910, 1920 and as total crop land in 1925 and 1930.

Table 10.- Percentages of farm operators reporting specified livestock and acreages, and averages for those reporting, Haskell County, Kansas, 1925-35

Item	Percentages reporting 1/			Averages 2/		
	1925	1930	1935	1925	1930	1935
Livestock owned:						
Cattle other than milk cows	77	53	64	28	11	11
Cows milked	73	51	70	5	3	5
Hogs	60	39	38	11	12	8
Chickens	77	63	74	108	104	99
Specified acreages:						
Crop land harvested	96	97	70	299	482	195
Pasture land	88	73	64	395	197	96
Idle or fallow land	14	23	87	152	182	166
Winter wheat	85	89	65	230	468	198

United States Census of Agriculture.

1/ Percentages based on 360 operators in 1925, 461 in 1930, and 429 in 1935.

2/ Average size of farm was 683 acres in 1925, 672 in 1930, and 692 in 1935.

This shift in agriculture necessitated a readjustment in the size of farm. As compared with the average farm unit in 1905 of nearly two sections (1,238 acres) when ranching predominated, the average holding in 1920 comprised about 700 acres. 38/ Although ranches were still important, the number of small-scale farmers had greatly increased, thus accounting for the smaller average size. The fact that the average size remained about the same between 1920 and 1930 obscures significant changes that were taking place. With one exception cattle ranches had disappeared by the end of this period, but there was a rapid increase in the number of wheat farms. These changes tended to counterbalance each other, for wheat farms require larger acreages than those that made up the early homesteads, if power machinery is to be used efficiently. The family-sized wheat farm in the county now ranges from about 320 to 2,000 acres. Some farms of less than 320 acres are found, but they are usually operated by young men just beginning to farm or by part-time farmers.

The Mennonites who entered the county during this period were conservative farmers who exerted a stabilizing influence upon farming. Although following the general trend toward wheat farming, they continued

38/ U. S. Census of Agriculture.

to diversify their agriculture by supplementary livestock enterprises.

The shift in farming is closely related to the immigration of large numbers of farm operators (Table 3, p. 17). Besides having smaller resources than the farmers already in the county (Tables 11 and 12), these newcomers were largely without experience in dry-land farming. The change was most rapid during the wheat boom of the 1920's when the rate of turnover was very rapid. The significance of this replacement of successful farmers who had gained valuable experience in the locality by others who were unfamiliar with the vagaries of the climate can hardly be overestimated. The rush of population also increased the competition for wheat land and accelerated the speed at which it was broken out.

Table 11.- Percentages of farm operators reporting specified livestock and acreages, and averages for those reporting, by year first recorded in Haskell County, Kansas, 1925

Item	Percentages reporting 1/: Records begin in -		Averages 2/: Records begin in -	
	1920 or before	1925	1920 or before	1925
Livestock owned:				
Beef cattle	83	84	24	34
Cows milked	79	80	6	4
Hogs	66	79	11	11
Chickens	84	80	118	91
Specified acreages:				
Crop land harvested	97	94	326	261
Pasture land	93	82	404	380
Idle or fallow land	10	19	103	186
Winter wheat acreage	85	84	256	197
Winter wheat bushels	85	84	3,873	3,056

Special tabulation, U. S. Census of Agriculture, 1925.
1/ Percentages based on 208 operators enumerated in 1920 or before, and 152 first enumerated in 1925. The year first included in an agricultural census is used as an indication of length of residence and of farming experience in the county. See Appendix, Methodology.
2/ Average size of farm for those first recorded in 1920 or before was 723 acres as compared with 629 acres for those first recorded in 1925.

Table 12.- Percentages of farm operators reporting specified livestock and acreages, and averages for those reporting, by year first recorded In Haskell County, Kansas, 1930

Item	Percentages reporting 1/: Records begin in -			Averages 2/: Records begin in -		
	1920 or before	1925	1930	1920 or before	1925	1930
Livestock owned:						
Cattle other than milk cows	69	52	43	15	10	8
Cows milked	68	54	40	4	4	3
Hogs	58	33	30	15	15	6
Chickens	78	64	54	120	112	89
Specified acreages:						
Crop land harvested	99	100	94	515	575	398
Pasture land	87	73	62	240	150	173
Idle or fallow land	29	29	17	181	157	203
Winter wheat	93	95	84	488	566	384

Special tabulation, U. S. Census of Agriculture, 1930.

1/ Percentages based on 142 operators enumerated in 1920 or before, 112 first enumerated in 1925, and 200 first enumerated in 1930. The year first included in an agricultural census is used as an indication of length of residence and of farming experience in the county. See Appendix, Methodology.

2/ Average size of farm was 796 acres for those first recorded in 1920 or before, 755 for those first recorded in 1925, and 533 for those first recorded in 1930.

Growth of Tenancy

Free land, under the Homestead act, was no longer available in the county after 1909. Newcomers with small resources usually rented land at first and tried to acquire holdings later if they were successful with their crops. But they were inclined to rent rather than to buy additional acreage. This was particularly true during the years 1920-30 when land was relatively high priced. Figure 7 (p. 31) shows the rapid incease in tenancy in Haskell County.

The pressure to plant all rented land to wheat was so great that many farmers attempted to buy at least a quarter section on which they could reserve 2 tracts for pasturage and to plant row crops. Thus, the number of owners with additional acreage rented (part-owners) increased from 36 in 1920 to 106 in 1925 and to 158 in 1930 (Figure 7).

Between 1920 and 1930 land was bought not only by bona fide farmers but also by speculators farther East. Small shopkeepers, bankers, and lawyers saw an opportunity for an excellent financial venture. From about 1922 to 1930, they swarmed out to buy Western land and prices soared as their speculation got under way. 39/ The non-resident ownership of land became associated, to some extent, with a system of non-resident operation known as "suit-case farming."

Suit-Case Farming 40/

The mechanized production of wheat makes it possible for an operator to raise a crop by being present only a few months of the year during planting and harvest time, the actual length of time depending, of course, upon the extensiveness of farm operation. Wheat is much better adapted to this system than other crops which require more care. Thus non-resident farm operation, or suit-case farming, became more common with the introduction of the combine and tractor. By 1936 nearly one-third of the farm operators lived outside the county (Table 13).

Table 13.- Number of resident and non-resident farm operators, by size of farm, Haskell County, Kansas, 1936

Size of farm (acres)	All operators	Resident operators	Non-resident operators		
			In county	Out of county	Total
Total operators	548	299	73	176	249
0- 80	3	2	1	-	1
81- 240	103	36	18	49	67
241- 400	99	43	14	42	56
401- 560	87	52	6	29	35
561- 720	80	48	9	23	32
721- 880	46	32	-	14	14
881-1,040	52	36	8	8	16
1,041-1,200	19	10	7	2	9
1,201-1,360	16	14	-	2	2
1,361-1,920	32	20	7	5	12
1,921-2,560	6	4	1	1	2
2,561-3,840	3	1	2	-	2
3,841-5,760	-	-	-	-	-
5,761-over	2	1	-	1	1

Land Use Survey, Land Use Planning Division, Region 12, Resettlement Administration, Amarillo, Texas.

39/ Carlson, Avis D., Dust Blowing, Harpers Magazine, Vol. 171, July 1935, p. 156.

40/ The term is used in this report to refer to farm operators who reside outside the county and come in only to plant and harvest their wheat crops.

Eleven of the 51 farmers included in the area studied intensively lived outside the county. Some of them were former residents who continued to farm in the county even after they had changed their domicile. The majority had never lived in the county, but had begun suit-case farming recently because of the chance for quick profits. One farmer, who owned a large place in Sumner County, Kansas, had acquired this additional land when his sons grew up and became his partners. Another operator who had lost his position with an oil company was planning to continue working land in western Kansas. All but one of the 11 nonresident operators had other work. Five farmed elsewhere, two sold farm implements, and the others included a general contractor, an auto mechanic, and a farm laborer.

The usual practice of these suit-case farmers is to plant only wheat. Five of the 11 operators planted row crops during at least one of the last 4 years, on abandoned wheat land. This will probably not be continued when favorable weather returns. Few of these farmers have made a practice of summer fallowing any of their land except that which they kept out of cultivation to comply with the program of the Agricultural Adjustment Administration. One operator, however, summer fallowed one-third of his land each year. Like many other farmers in the county, they had no general disposition to follow moisture-conservation practices previous to this drought. Only the exceptional farmer habitually made a practice of summer fallowing.

Suit-case farming may have serious disadvantages during a drought. The operator usually is not present when steps should be taken to prevent soil blowing. Even if he knows of the danger, he may not be willing or financially able to adopt the necessary measures of control, especially if he has no hope of a crop. His soil may blow over onto an adjoining farm and ruin a field that would otherwise yield a crop.

Recent Trends in Farming, 1931-1936

Effects of Depression and Drought

The post-war prosperity so stimulated the production of wheat that surpluses began to accumulate and glut the market, and the price of wheat per bushel dropped from nearly $1 in 1929 to 63 cents in 1930.

To raise enough revenue to meet fixed charges for interest and taxes, expensive machinery, gasoline, and repairs, the farmers attempted to counterbalance low prices by increasing wheat production. The largest acreage in the history of the county was planted in the fall of 1930 and a bumper crop was harvested in 1931. The Kansas State Board of Agriculture reports a production of about 3½ million bushels but this is probably an underestimate. At harvest, the price dropped to 25 cents a bushel, 41/ the lowest ever offered in Haskell County. The low returns

41/ The average price for the State of Kansas was 33 cents for both 1931 and 1932 (Table 6, p. 37).

to the producers was almost equivalent to a crop failure. Many farmers stored part or all of their wheat, hoping to sell it the following year at better prices. But a year later 25 cents was again offered, and by that time the cost of storage (2 cents per bushel per month) had absorbed the value of the wheat. A complete loss resulted.

The drought of 1932-36 was the most serious in the history of the county, according to available weather records. Crop failures were nearly complete, wheat production varying from about 3 percent to 13 percent of the 1929 crop. 42/ The consequences of the drought, combined with the economic depression, brought a major crisis in the economic life of the county.

Most of the farm operators, with no available non-farm income, were utterly unprepared to meet this critical situation. Because of the high rate of mobility more than one-half of the Haskell County farmers included in the U. S. Census of Agriculture for 1930 had farmed there for less than 10 years (Fig. 6, p. 24). It seems probable that the newness of the operators and their inexperience were important factors in the rapid plowing up of the land. Had they experienced previous extended droughts, they would have hesitated to plow up such a large proportion of the native grass which gave a protective cover to the soil and furnished feed for livestock. Those with longer experience planted wheat, but wisely left a part of their land in native grass pasture.

Successive failures of the wheat encouraged farmers to increase their production of livestock (Table 10, p. 47). This increase in livestock production is somewhat surprising in view of the effect of drought on pastures and deserves some explanation. Since most of the land in Haskell County is broken out, only a small number of livestock are supported by the native grass pastures. The increase in feed for livestock during drought years, then, comes mainly from sorghum crops planted on abandoned wheat ground - a measure by which the farmers hope to obtain at least a small income from their land. Certain varieties of drought-resistant maize will produce at least a feed crop even during the driest years. That livestock enterprises and pasture were important to survival between 1930 and 1935 is indicated by the data on persistence of farm operators (Table 5, p. 25). As dry periods recur with some regularity, a more stable agriculture could be established by supplementing wheat farming with small livestock enterprises.

Farmers who came to the county during the period, 1930-35, had little effect upon agriculture because of their small numbers. Although many of those who came were substantial farmers, they had smaller farms on the average than those who began farming earlier; also, a smaller proportion of them had native grass pasture or livestock (Table 14).

42/ Biennial reports of the Kansas State Board of Agriculture. The figures are high during these years because they are estimated rather than actual yields. See Methodology.

Table 14.- Percentages of farm operators reporting specified livestock and acreages, and averages for those reporting, by year first recorded in Haskell County, Kansas, 1935

Item	Percentages reporting 1/: Records begin in -				Averages 2/ Records begin in -			
	1920 or before	1925	1930	1935	1920 or before	1925	1930	1935
Livestock owned:								
Cattle other than milk cows	76	92	83	47	13	10	8	11
Cows milked	82	84	89	49	6	6	5	3
Hogs	47	98	72	45	10	10	5	10
Chickens	87	87	84	54	99	111	101	76
Specified acreages:								
Crop land harvested	74	73	73	56	190	206	212	152
Pasture land	78	68	66	41	146	71	62	55
Idle or fallow land	88	88	89	81	181	149	157	174
Winter wheat acreage	69	64	72	46	192	218	205	170
Winter wheat bushels	69	64	72	46	1,024	856	1,022	772

Special tabulation, U. S. Census of Agriculture, 1935.

1/ Percentages based on 144 operators enumerated in 1920 or before, 74 first enumerated in 1925, 139 first enumerated in 1930, and 72 first enumerated in 1935. The year first included in an agricultural census is used as an indication of length of residence and of farming experience in the county. See Appendix, Methodology.

2/ Average size of farm was 787 acres for those first recorded in 1920 or before, 710 acres for those first recorded in 1925, 705 acres for those first recorded in 1930, and 459 acres for those first recorded in 1935.

The benefit payments of the Agricultural Adjustment Administration 43/ to the wheat farmers of Haskell County have enabled most of the operators to remain in the county and cultivate their land but their influence in reducing the wheat acreage in Haskell County has been of less importance, for the deficiency of moisture during almost the entire drought period would in itself have persuaded some farmers to diminish their acreage.

43/ The Agricultural Adjustment Act was passed in May 1933, to control the production of basic agricultural commodities by a system of benefit payments. The purpose was to raise the purchasing power of the farmer, which had declined, because of the accumulation of surpluses of agricultural commodities after the World War.

The payments of the Agricultural Adjustment Administration were computed on the basis of wheat acreage planted by each operator for the 3 years, 1930-32, but the average yield was calculated on a county basis. This method was particularly advantageous to farmers who planted all of their land to wheat during this period. Farmers who had kept part of their land in grass were less fortunate because their wheat base acreages were low; those who practiced summer fallowing were at a similar disadvantage although such a soil-conserving practice had probably helped to raise the average yield per acre for the county.

The recent drought has encouraged farmers to adopt measures designed to conserve moisture and control wind erosion in an attempt to cope with problems that have become really serious not only in Haskell County but throughout a large portion of the Southern Great Plains as well. This tendency has received a great impetus from the Soil Conservation Service, 44/ the Agricultural Adjustment Administration, and the Resettlement Administration, all of which have promoted such erosion-control measures as contour farming, listing at right angles to the wind, terracing, the planting of cover crops to control soil blowing, and similar practices.

Resources Other than Agriculture

Haskell County is primarily agricultural but a considerable part is underlaid with natural gas and it is possible that oil may be discovered. 45/ The first producing well, located in the southwestern part of the county, 46/ was drilled in 1931 and has an estimated capacity of 18 to 20 million cubic feet but none of its output has ever been sold. In February 1937, a gas well was connected with a pipe line for the first time. 47/ A new plant producing carbon black from the natural gas, operated just across the line in Grant County, employed 25 men in 1937. During the spring of that year 4 wells in the vicinity of the plant

---

44/ On April 27, 1935, President Roosevelt signed a Soil Conservation Act, directing the Secretary of Agriculture to "coordinate and direct all activities with relation to soil erosion" and to carry out certain activities for the prevention of soil erosion. To exercise the powers conferred upon him by this Act the Secretary was directed to establish the Soil Conservation Service. After certain portions of the Agricultural Adjustment Act were declared invalid by the Supreme Court on January 6, 1936, Congress passed a new act, in the form of an amendment to the Soil Conservation Act, entitled the Soil Conservation and Domestic Allotment Act which authorizes the Secretary through the Agricultural Adjustment Administration to make payments to farmers who follow recommended soil-conserving practices.

45/ According to the Sublette Monitor of March 25, 1937, during 1936 there were 53 oil fields and 12 gas fields added to the list of producing districts in western Kansas.

46/ Sublette Monitor, January 7, 1937

47/ Ibid., February 11, 1937.

were already producing gas, 1 was being drilled, and plans were made for 32 tests nearby. 48/

Many farms are now leased to oil companies at an annual rate of 25 cents to $1 an acre. Without interfering with the farming operations, this has an immediate and practical benefit to the landowners in the county, making a substantial contribution to their cash incomes. The possibility of using gas as a source of power to pump water for irrigation has not yet been explored, but it seems probable that experiments will be undertaken soon.

48/ Ibid., March 25, 1937.

Chapter IV

STANDARDS OF LIVING

The first settlers in Haskell County were compelled to forego many comforts they had known and were forced to adapt their way of living to frontier conditions. They lived in dugouts or sod houses temporarily and endured hardships because they wanted to own land. As Isaiah Bowman states:

> "Hard work, plain living, poorer schools, and a meager social life for his wife and his family were the price the pioneer paid for a new chance on the frontier. All expected to pay the price for a few years only, because the air was full of stories of wealth quickly acquired." 49/

The agricultural economy of the early settlers was relatively self-sufficient. During periods of favorable weather there was a trend toward the commercialization of agriculture and a rise in the standard of living; this was most marked during the decade 1920-30. Droughts tended to reverse both of these trends.

Living Conditions and Self-Sufficiency of Early Settlers, 1885-1900

Housing

As there was no timber or stone in the county or the surrounding area, it was expensive to erect frame houses. So most of the early settlers built dugouts or sod houses. The dugout was simply an excavation resembling a cellar with a roof over it; the sod house had a roof, a door, and windows. The dimensions of the usual pioneer dwelling were about 11 by 13 feet inside and 14 by 18 feet outside. Homes of a better type were built in Santa Fe because there was more rivalry among the village families and because tradespeople as a rule had more available cash than farmers.

The very limited resources of the early settlers ordinarily comprised a small reserve of cash, a few implements, and some household goods. The furnishings were extremely scanty - usually a table, chairs, dishes, a chest, and possibly a sewing machine. All of the families lived about the same way.

The settlers often came to the county in groups. Frequently a family was followed by relatives or friends who filed claims nearby and built houses in adjoining corners of their quarter sections. This arrangement allowed from two to four families to live close together but

---

49/ Bowman, Isaiah, The Pioneer Fringe, American Geographical Society, New York, 1931, p. 25.

the next nearest neighbors would be located at least half a mile away. Proximity was important since it provided companionship for the family when the settler had to drive his team and wagon to the nearest railroad, located about 30 miles from the center of the county, for provisions and supplies.

Hazards of Physical Environment

The scarcity of water was one of the problems that loomed largest in the minds of the early settlers. However, an extensive supply of underground water was available at a depth of 100 to 200 feet. Two wells were soon dug in the county - one in each of the two villages of the county, Ivanhoe and Santa Fe. One old resident reported that he had seen at least half of the population of the county at a time around these two wells. To prevent any dispute over turns at the well, a book was kept for registering each man upon his arrival. 50/ Every family had a cistern and a water barrel at home, but water had to be hauled from one of these wells or from the Cimarron River to supply the household and stock. This took a great deal of time.

The introduction of windmills began shortly after settlement. By 1888 one well driller reported an average of one sale daily. 51/ Well drills made it possible to reach underground water at a considerable depth without great expense, and windmills furnished a relatively cheap and reliable means of utilizing the prevailing high winds to do the pumping. 52/ But the cost of a well and windmill (several hundred dollars) was more than many farmers could afford. Sometimes three or four neighbors shared the expense and the water.

Droughts, dust storms, high winds, blizzards, and hail storms visited the settlers. It is reported that the early dust storms were nearly as serious as the one in the spring of 1934, but the dirt did not pile up so much because most of the land was covered with native grass. If there was sufficient rain for crops to grow, a hail storm might come before harvest time and destroy the crop. Blizzards were feared in winter even more than dust storms and high winds in summer. A big blizzard occurred in January 1886, the first winter that settlers were in the county. An early settler reported that he was snow-bound for 3 days in his half-dugout and that the temperature reached 25 degrees below zero. The snow remained on the ground for 35 or 40 days and the prairie was littered with dead cattle that had broken away and perished in the storm. 53/

50/ Newspaper clipping from Topeka Capitol dated July 7, 1907, in Haskell County file of the Kansas State Historical Society.

51/ Santa Fe Monitor, June 29, 1889.

52/ See Clark, Carroll D. and Roberts, Roy L., People of Kansas, Kansas State Planning Board, Topeka, 1936, p. 10.

53/ Clipping taken from Topeka Capitol, Mar. 10, 1929, in Haskell County file of Kansas State Historical Society.

Prairie fires were a source of danger from the time of first settlement until most of the land was broken out. The broad sweep of the prairies, covered with grass which became dry as tinder after only short periods of dry weather, was very susceptible to such fires. If accompanied by a high wind, a fire was extremely dangerous. But even in itself it would tend to create air currents which would facilitate its spread. Burning tumbleweeds borne along by the high wind or air currents sometimes carried the fire across a considerable space of plowed land. The flames were fought at each end by using wet feed sacks in an attempt to narrow it down to where it could be entirely extinguished. A water wagon and a large group of people were needed, so most of the residents joined forces in fighting the fire. Farmers lost buildings, grain, and livestock, and sometimes all the improvements on a place were destroyed. The local paper cautioned the people to protect themselves from prairie fires by plowing fire guards around their farmsteads.54/

Relatively Self-Sufficient Economy

After their first season on the land, the early settlers attempted to raise as much of their own food as possible, buying only indispensable clothing, fuel, and staples like coffee, sugar, and spices. Cow and buffalo chips were chiefly used as fuel, for coal was very expensive.

Owing to the recurrent droughts the homesteaders soon exhausted their small reserves and had to subsist on the barest necessities. Because of weather or the depredations of grasshoppers and chinch bugs, the cash income they expected to get from crops frequently did not materialize and there was much competition for the little work that was available. Those who had food often shared it with their friends and relatives.

Settlers gradually adapted themselves and acquired livestock on which to depend for a greater part of their living. Interspersed good years served to revive faltering hopes and around the turn of the century the favorable weather conditions enabled the farmers to begin raising crops again.

Changes in Living Conditions, 1900-36

Improvement in Housing

Housing underwent a gradual transition. Sod houses and dugouts were replaced by frame houses or by adobe houses made of a mixture of clay and water poured into a form and allowed to harden, a layer at a time. This house usually had one story, doors and windows, and walls about a foot thick. Although this type of construction proved to be well adapted to the country, it was not so durable as frame and few of these houses remain today. When a new house was built, the discarded

54/ Santa Fe Monitor, March 16, 1893.

dwelling was frequently used as a chicken house or as an out-door cellar. The early frame houses were so rough they were scarcely more comfortable than a sod house, but they were more expensive and indicated a higher status.

As the settlers became more prosperous, they improved their houses and a number were modern in every respect. Basement houses, fairly common in the last decade, represent a modern adaptation of the dugout; they are less expensive to build and to heat than a home built entirely above ground. In some cases the basement house was designed merely as a temporary shelter that could be occupied until there was money for completing the upper part; in other cases, it was built for permanent use.

The present dwellings of farmers vary from shacks to modern dwellings. Of the 37 dwellings of resident farmers in the selected area, 27 were frame, 9 were basement, and 1 was adobe. Seven had electricity, 12 had running water, and 4 had bathrooms. In 1936 a Rural Sociology and Farm Management Survey of 202 resident farm families in Haskell and Seward Counties 55/ showed that 68 percent had washing machines, 55 percent refrigerators, 49 percent sinks, 20 percent bathtubs, 19 percent electric lights, 13 percent indoor toilets, and 9 percent furnaces.

Improvement in Communication Facilities

The first telephone line in Haskell County was built in 1892 between the courthouse and a residence about 2 miles distant. In 1896 it was extended to the town of Plains on the southeast, and to Garden City on the north, supplying services to several farmers along the way. From 1896 to 1908 further extensions were made, and in 1913 a 50-line switchboard was installed in Sublette; this connected six exchange subscribers with the several farmers. In 1914 the Sublette exchange was bought by a larger company and in turn became the property of a national company in 1918. The number of subscribers increased, especially after 1920, until there were 134 in 1929 and 197 in 1930.

The coming of the railroad in 1912 brought markets closer to the farmers and decreased the cost of supplies which previously had been freighted by wagon a long distance. Automobiles were introduced in the county as early as 1909 but did not come into common use until after the World War. During the 1920's the use of radios increased rapidly, providing an important source of information and recreation for the farmers. Of the 37 households of resident farmers in the selected area, each possessed an automobile, 12 had radios, and 9 reported a telephone in 1936. Of the 16 Mennonite families none had radios because it was contrary to their religious principles. For the same year, a survey of 202 resident

---

55/ Land Use Planning Division, Region 12, Resettlement Administration, Amarillo, Texas. The survey was made in 1936, but conditions were hardly more favorable than in 1930.

farm families in Haskell and Seward Counties 56/ reported that 95 percent had automobiles, 59 percent had radios, and 35 percent had telephones.

Village Conveniences

There was a steady improvement in standards of living in the two villages of Sublette and Satanta. At first the residents had to haul water from Santa Fe or other nearby towns but soon they began to drill wells and put up windmills. About 1915 both villages constructed city wells and built water towers. The towers could be seen for miles around and, as the country had few roads, served as guide posts for the farmers who came to town to trade. About 1919 an electric-light firm was established by a resident of Satanta. Lines were put up and lights used in many of the homes, but the high school and some of the business houses retained their own light plants. At about the same time Sublette obtained electric lights. Natural gas was piped to both villages in 1929.

Change from a Self-Sufficient to a Commercial Agriculture

Farmers in Haskell County no longer produce enough to supply their needs. More and more they have become producers of a cash crop and are dependent on sources outside the county for most of their supplies. Ranchers who operated on a large scale had good incomes but it was not until the development of wheat farming that the general level of income began to rise rapidly. The increase in cash expenditure for living was due in part to a rising standard of living and in part to the decrease in diversified farming. The general increase in specialization was similar to that which took place in the country as a whole. But the change in this county, associated with the mechanization of agriculture, came more rapidly and specialization has gone farther than in most other agricultural areas.

Extent of commercialization is indicated by the rise in farm receipts. For 1922-25, 57/ the estimated average income from farm sales was $1,030,000, or an average of about $3,000 per farm. 58/ In 1926 the estimated value of crops was $1,612,000 as reported by the same source. The U. S. Census of Agriculture reported the value of crops to be $3,567,-632 in 1929, or an average of $7,756 per farm. The increase in the number of income tax returns - from 71 in 1926 to 168 in 1929 59/ - is a further indication of commercialization and prosperity.

56/ See p. 59.

57/ Market Data Handbook of United States, 1929 Domestic Commerce Series, No. 30.

58/ The U. S. Census of Agriculture reported 360 farms in Haskell County in 1925.

59/ Market Data Handbook, Op. cit., 1929.

Effects of Recent Droughts on Standards of Living

The extended drought of 1932-36 materially affected the standard of living in Haskell County. Although farmers who had been in the county for some time were accustomed to the vicissitudes encountered during the occasional years of drought, their situation became precarious as the drought continued in 1933. As the commercial nature of their farming demanded a large cash expenditure for fuel, machinery repairs, interest on indebtedness, and other items, farmers were unable to pay their taxes, to meet the interest on their mortgages, or to buy even food and clothing. The severity of the crisis here and in western Kansas was not generally realized throughout the country, because of the localized character of the first 2 years of the drought and because of the general economic depression.

The situation in Haskell County was most critical in the early part of 1933. Stores in Sublette and Satanta failed because they extended credit and could not collect enough to remain in business. The wheat crop, the chief source of income, had been a net loss for 3 years through low prices and crop failures. The number of income tax returns decreased from 168 in 1929 to 26 in 1933.

In May 1933, the Agricultural Adjustment Program was rushed through Congress. When the payments from this program reached the county, the farmers were furnished a considerable amount of cash on which they could operate. Relief expenditures and farm loans were also available. The influence of these payments was felt not only by those who received the funds directly but also by creditors, public agencies, banks, and stores throughout the community. The combined effect of Federal programs of assistance was to restore morale and enable the residents to subsist on a lowered but fairly comfortable standard.

Benefit payments played an important part in the farm income (Table 15). In 1936, farm expenses averaged $1,202 for all farmers but cash receipts, only $913, leaving a deficit of nearly $300. Government subsidies added an average of $812 to the farmer's income, but as cash expenditures for living expenses actually amounted to $785, there still remained a deficit of $262. This was offset principally by funds obtained from loans and by leaving unpaid the farm and family obligations previously incurred.

Farm acreage is closely associated with average family income and expenditures for food, clothing, rent furnished, advancement, and other items (Table 16) because the amount of Government subsidy varies directly with the size of farm. Except for this larger subsidy and usually greater resources, operators of larger units would be at a disadvantage during a drought.

The average budget maintained by owners was greater than that for tenants (Table 17). The owners, with more extensive farms, had higher gross incomes, substantially increased by the larger benefit payments from the Agricultural Adjustment Administration (Table 15).

Table 15.- Cash income and expenditures of 201 resident farm families, Haskell and Seward Counties, Kansas, 1936

Item	Average per farm family			
	Total	Owners and Tenants	Owners	Tenants
Cash receipts	$346,861	$1,725	$1,965	$1,392
Farm sales 1/	183,576	913	990	806
Government subsidies	163,285	812	975	586
AAA and wind erosion	154,607	769	946	518
Relief	8,678	43	26	68
Expenditures	399,566	1,987	2,195	1,696
Cash farm expenses 2/	241,612	1,202	1,365	974
Cash costs of living	157,954	785	830	722
Net cash available for family living and debt service	105,249	523	600	418
Deficit 3/	-52,705	-262	-230	-304

Rural Sociology and Farm Management Survey, Land Use Planning Division, Region 12, Resettlement Administration, Amarillo, Texas.

1/ Includes receipts from crops, livestock, livestock products, machinery sales, labor, and machine hire. Borrowings are not included.

2/ Includes purchases of feed, seed, livestock, machinery, repairs, labor, and other operating expenses. Payments of principal and interest are excluded.

3/ Deficits have been offset principally by funds obtained from loans and unpaid farm and family obligations.

Contrary to what might be expected, there was no consistent relationship between size of household and average value of family living (Table 18). There was a slight tendency for the value of living to rise with increases in the size of households up to five persons, after which it declined. The proportion of total expenditures for food was greater for households of six or more members than for the smaller households, whereas the reverse was true for rent, household operation, and incidental expenses. Households comprising three to six members allocated a larger proportion of expenditure for furnishings and health than either smaller or larger households. No significant relation is apparent when the categories of advancement and fuel are considered. The average value of family living varied directly with the amount of Government subsidy for each size-of-family group.

Table 16.- Distribution of average value of family living among the principal items used, by size of farm, 202 resident farm families, Haskell and Seward Counties, Kansas, 1936

Size of farm in acres	Number of families	Averages									
		Value of living			Food			Clothing	Rent furnished	Advancement	All other
		Total	Furnished	Purchased	Total	Furnished	Purchased				
Total	202	$1,077	$291	$786	$395	$179	$216	$117	$112	$60	$393
80 - 239	14	689	185	504	274	128	146	73	57	31	254
240 - 399	28	852	257	575	382	176	206	87	82	29	252
400 - 559	27	909	236	673	333	151	182	96	85	52	343
560 - 719	37	1,028	254	774	375	168	207	107	86	39	421
720 - 879	37	1,128	309	819	439	198	241	129	110	65	385
880 - 1,039	21	1,162	325	837	411	180	231	146	145	60	400
1,040 - 1,199	11	1,458	400	1,058	442	227	215	154	173	87	602
1,200 and over	27	1,483	404	1,079	473	215	258	151	191	125	543

Rural Sociology and Farm Management Survey, Land Use Planning Division, Region 12, Resettlement Administration, Amarillo, Texas.

Table 17.- Percentage distribution of average value of family living among the principal items used, by tenure of operator, 202 resident farm families, Haskell and Seward Counties, Kansas, 1936

Tenure	Number of families	Average value of living	Percentages								
			Total value		Food			Clothing	Rent furnished	Advancement	All other
			Furnished	Purchased	Total	Furnished	Purchased				
Total	202	$1,077	27.1	72.9	36.7	16.6	20.1	10.8	10.5	5.6	36.4
Owners	118	1,151	27.8	72.2	34.9	15.8	19.1	10.9	12.0	6.0	36.2
Tenants	84	975	26.0	74.0	39.6	18.1	21.5	11.0	7.9	4.8	36.7

Rural Sociology and Farm Management Survey, Land Use Planning Division, Region 12, Resettlement Administration, Amarillo, Texas.

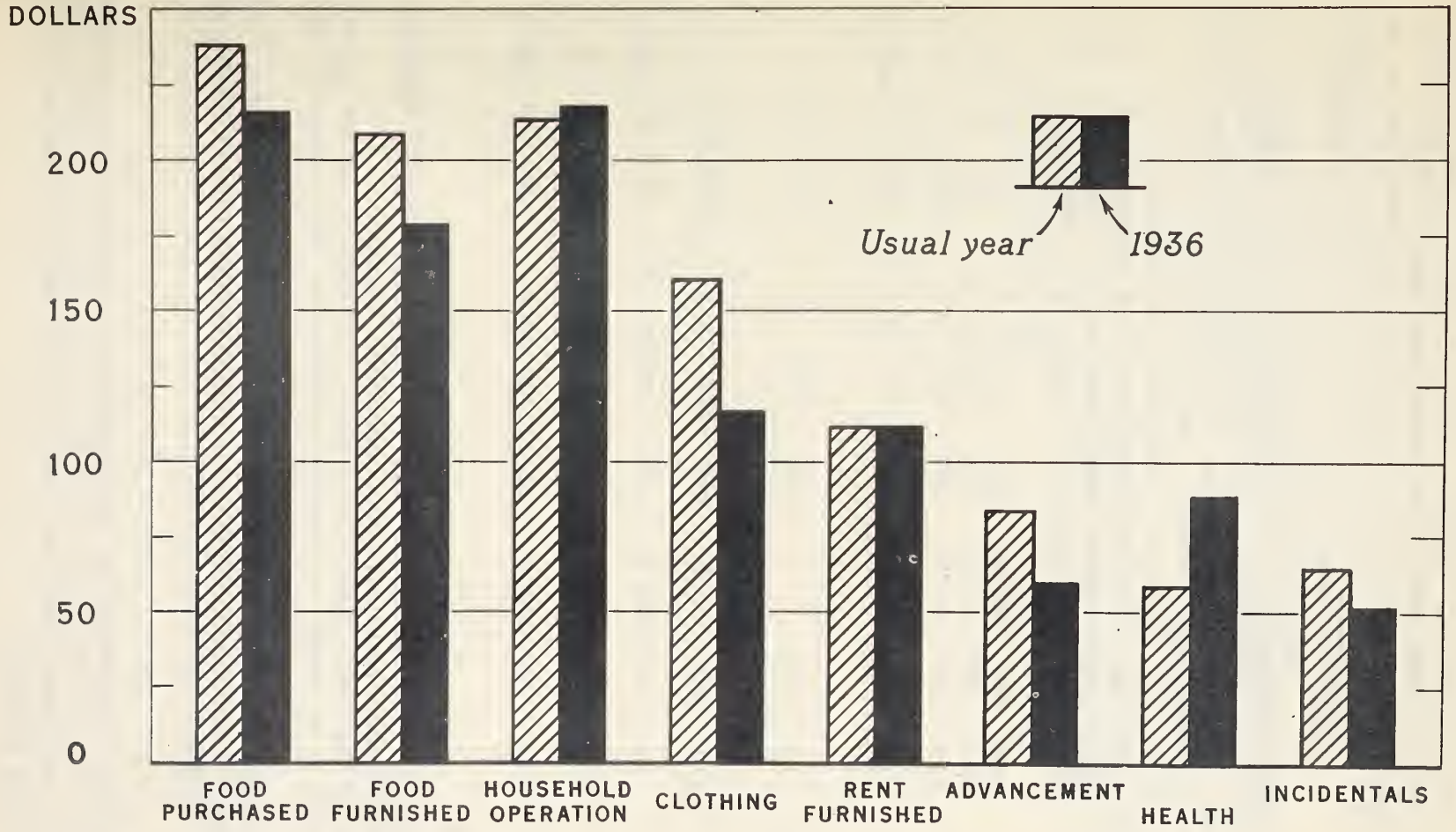
Table 18.- Distribution of average value of family living among the principal items used, by size of family, 202 resident farm families, Haskell and Seward Counties, Kansas, 1936

Item	All families	Size of family in persons: 1	2	3	4	5	6	7 and over
Number of families	202	7	37	35	54	29	20	20
Total value of living	$1,077	$496	$818	$1,036	$1,107	$1,406	$1,093	$1,265
Furnished	291	94	218	269	300	392	302	363
Purchased	786	402	600	767	807	1,014	791	902
Food	395	194	288	369	377	477	442	596
Furnished	179	39	107	171	173	256	208	254
Purchased	216	155	181	198	204	221	234	342
Clothing	117	43	73	106	121	164	133	151
Rent furnished	112	55	111	98	127	136	94	109
Household operation	104	71	92	112	99	128	97	104
Fuel	66	28	53	69	72	79	63	71
Furnishings	48	4	25	60	49	78	57	29
Advancement	60	25	66	44	63	78	59	53
Health	89	4	48	107	113	109	85	74
Incidentals	52	56	43	52	56	58	55	43
Investment	34	16	19	19	30	99	8	35

Rural Sociology and Farm Management Survey, Land Use Planning Division, Region 12, Resettlement Administration, Amarillo, Texas.

The average value of all items of family living was only 9 percent less in 1936 60/ than the usual value for the same family. If the survey had been taken in 1933, the expenditures might have been much lower. The chief items that decreased were expenditures for more durable items like clothing and for "luxuries" included under advancement and incidentals, and for food (Table 19 and Fig. 12). Residents of the county stated

60/ This survey was taken as of October 1, 1936, and expenditures were reported for the previous 12 months. See p. 59.



U. S. DEPARTMENT OF AGRICULTURE NEG. 32834 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 12.- DISTRIBUTION OF AVERAGE VALUE OF FAMILY LIVING FOR A USUAL YEAR AND FOR 1936, 202 RESIDENT FARM FAMILIES, HASKELL AND SEWARD COUNTIES, KANSAS.

SOURCE: RURAL SOCIOLOGY AND FARM MANAGEMENT SURVEY, LAND USE PLANNING DIVISION, REGION 12, AMARILLO, TEXAS

Table 19.- Distribution of average value of family living among the principal items used, for a usual year and for 1936, with relative changes from the usual year, by tenure 1/

Item	Value of items of family living for usual year and for 1936 with relative changes								
	All families			Owners			Tenants		
	Usual	1936	Percent change	Usual	1936	Percent change	Usual	1936	Percent change
Total value of family living	$1,143	$1,043	-8.8	$1,208	$1,112	-7.9	$1,048	$948	-9.5
Furnished	321	291	-9.3	353	320	-9.3	279	253	-9.3
Purchased	822	752	-8.5	855	792	-7.4	769	695	-9.6
Food	448	395	-11.8	458	402	-12.2	434	386	-11.1
Furnished	209	179	-14.3	215	182	-15.3	202	176	-12.9
Purchased	239	216	-9.6	243	220	-9.5	232	210	-9.5
Clothing	161	117	-27.3	168	125	-25.6	151	107	-29.1
Rent furnished 2/	112	112	-	138	138	-	77	77	-
Household operation	214	218	1.9	222	229	3.1	199	202	1.5
Advancement	84	60	-28.5	100	69	-31.0	62	47	-24.2
Health	59	89	50.8	60	99	65.0	57	75	31.6
Incidentals	65	52	-20.0	62	50	-19.3	68	54	-20.6
Investment 3/	-	-	-	-	-	-	-	-	-

Rural Sociology and Farm Management Survey, Land Use Planning Division, Region 12, Resettlement Administration, Amarillo, Texas.

1/ Usual year is what each family interviewed (118 owners and 84 tenants) considered "usual," a normal or average estimate of the value of items used.

2/ Rent was valued the same for both years.

3/ Investments were omitted because of difficulties in arriving at satisfactory figures for the usual year.

that there had been a decrease in the attendance at movies in cities outside the county. Contributions to the local churches so decreased that home-missionary money was sent into the county to help pay the salary of at least one local minister.

The increase of 51 percent over the usual expenditure for health (Table 19) warrants explanation. Probably an important factor is found in the dust storms which caused discomfort and possibly some of the deaths due to respiratory diseases. According to a recent study by the Kansas State Board of Health, dust is an important factor in causing respiratory infections:

> "There is no evidence that any pathogenic organisms were carried by the dust and therefore the direct cause of the increase in respiratory infections could not be attributed to this factor. The dust, however, was exceedingly irritating to the mucous membranes of the respiratory tract, and, in our opinion, was a definite contributory factor in the development of untold numbers of acute infections and materially increased the number of deaths from pneumonia and other complications." 61/

61/ Brown, Earle, G., Gottlieb, Selma, and Laybourn, Ross L., Dust Storms and their Possible Effect on Health, Kansas State Board of Health, Public Health Reports, Vol. 50, No. 40, Oct. 4, 1935, pp. 1381-82.

Chapter V

COMMUNITY ORGANIZATION

Family farms surrounding small villages made up the pattern of early settlement in Haskell County, for the provisions of the settlement laws required dwellings on each homestead of 160 acres. The early settlers, although generally aspiring to a relatively higher social status for themselves, had no idea of establishing a new form of social structure. On the contrary, they strove to duplicate in their new environment the forms of social organization known to them in their home communities. During periods of prosperity they progressed rapidly in acquiring both the forms of social organization and the material elements of the culture to which they had been accustomed, but the drought years brought severe set-backs. Nevertheless, the schools and churches established almost as soon as the first settlers arrived have continued to hold an important position in the community life.

The high mobility of the farm families was not favorable to the formation of permanent social organizations in the open country, but many clubs were established in the villages. Some of these groups were branches of national organizations while others were local in character.

Periods of extended drought have always resulted in a degree of social disorganization. Efforts were made at first to maintain the existing social structure of the community, but financial retrenchment prevented these efforts from being entirely successful. An adjustment was worked out, but the level on which it was made depended upon the severity of the drought and the amount of public assistance that was available to mitigate its effects.

Early Community Organization

Organization of County

Haskell County, formed out of the southern part of Finney County, was organized on July 1, 1887, by a proclamation of the Governor. The county was only 24 miles square and in the Census that was taken at that time, 2,841 inhabitants with $850,119 worth of taxable property were enumerated. 62/ This small unit seemed desirable for a number of reasons. It was generally believed that the population would continue to grow rapidly and because of the slow means of transportation the proximity of a county seat would be convenient to the settlers. But most of all, the residents of the villages, Ivanhoe and Santa Fe, wanted to obtain the county seat. Then several individuals hoped to get some local office for themselves or their friends. Santa Fe was named the temporary county seat and was the principal contender with Ivanhoe for its permanent location. In the election that was called to decide the question, Santa Fe won.

62/ Journal of County Commissioners, pp. 8-9.

There were three townships when the county was organized, but others were added "with no other purpose than to supply jobs to that many more officers" 63/ so that by 1889 there were nine.

Trade Centers

Garden City supplied the needs of the first settlers but other small trade centers were soon established to serve the growing population. A map made in 1886 64/ shows four hamlets, each with a post office and one store or more, and two larger villages in the area that later became Haskell County. Both Ivanhoe and Santa Fe were laid out according to definite plans that allowed for their growth and development, and until the question of the county seat was decided, they were of nearly equal importance as trade centers.

Santa Fe, located in the center of the county, received its name from the historic trail that ran just a few miles north of the town site. 65/ It was created in the spring of 1886 when an investment company bought the town site and placed a series of advertisements in the local newspapers to attract settlers. By 1887, it had acquired a population of about 800, while Ivanhoe, 6 miles north, had an estimated population of about 500. Santa Fe boasted a hotel, a restaurant, two hardware and implement stores, a dry-goods store, two grocery stores, a blacksmith shop, a bank, and a newspaper. Ivanhoe was somewhat smaller in size, but had 12 business establishments. There were three smaller centers - Example, Stowe, and Taw. The first had one general store, the second had four, and the third had a mill.

The importance of securing the county seat in the development of a town is indicated by the fact that the number of business establishments in Santa Fe had increased to 18 by 1890, whereas those in Ivanhoe declined to 5. A few years later, the town site of Ivanhoe was sold for $10, and Ivanhoe joined the ranks of the "ghost towns" of Kansas. No stores were reported in the smaller centers after 1889, but they remained as post offices for the surrounding population.

The newspapers and speculators spoke with unbounded optimism of the future of the town of Santa Fe. But its prosperity was brief. Few of the inhabitants, except those who kept retail stores, had any means of support. There were no industries. Those with money speculated in

---

63/ Tyler, G. A., Haskell County in the Making, Supplement to the Sublette Monitor, June 12, 1930.

64/ Biennial Report of the Kansas State Board of Agriculture, 1885-86.

65/ The Santa Fe Trail, established in 1822, began at Independence, Mo., and followed a southwest direction. It crossed the Arkansas River at Cimarron, Kan., where it forked. The southern branch passed through the northern part of Haskell County, and cattle were frequently driven through the region before any settlement was made there.

town lots that soon proved valueless. The farmers had scanty resources and little money to spend for supplies, for even when crops were good the cost of marketing absorbed much of the price. Many people left Haskell County during the drought of 1889 when the Oklahoma Territory was opened. According to the Reference Books of R. G. Dun and Company, the population of Santa Fe declined from 800 to 166 during that year, but regained the former number the next year.66/ It continued to be the principal trade center of the county for about 25 years, but it was greatly affected by the drought of 1893-97.

Schools

After the settlers had provided shelter for themselves, their thoughts turned toward schools. In 1886 a public school was started in Ivanhoe and a number of others were established on a subscription basis in different parts of the county. Twenty-three school districts were organized the following year and the total school enrollment was 224. In 1888 the number of districts increased to 32, while the total enrollment grew to 614. The average length of school session for that year was only 14 weeks (Table 20).

An interesting development throughout the county during this early period was the organization of groups known as industrial schools, to promote propaganda relating to the abuses of trusts. They pictured the trust as giving the farmer a short price for his products and, through monopoly, selling them to consumers at a huge profit. These industrial schools were active in 1888 but were apparently abandoned within a short time. 67/

Social Life

Throughout the period of early settlement when the population was at its height, the social life of the county was lively. The settlers eagerly seized upon every occasion for social contacts. There was a great deal of informal visiting between the families. Weddings and birthday parties brought gatherings of neighbors and even funerals attracted large crowds. An early settler reported that the first meeting in her neighborhood was a "community sing." The neighbors gathered at one of the homes and sang songs mostly of a religious character. Sunday schools were organized about 1887, and by 1890 there were six churches - Baptist, Methodist, United Brethren, and three Presbyterian - with a combined membership of 209 persons. 68/

66/ This fluctuation in population is probably greatly exaggerated, but old residents agree that a number left Haskell County, particularly from the villages, to seek fortunes in the new territory.

67/ Santa Fe Monitor mentions frequent activities during 1889 but they appeared only occasionally the next year and no items were noted after 1890.

68/ Biennial Report of the Kansas State Board of Agriculture, 1889-90.

Table 20.- Number of school districts, enrollment, and average length of school term, Haskell County, Kansas, 1887-1934

Item	Year												
	1887	1888	1889	1890	1895	1900	1905	1910	1915	1920	1925	1930	1934
Number of school districts	23	32	34	34	33	13	12	19	20	22	24	25	25
Number of schools -													
Reported by district clerks	20	32	34	28	26	12	11 1/	18 2/	17	22	24	23	24
Having one teacher								19	14	21	20	21	20
Having two or more teachers								1	3	2	4	4	5
Enrollment:													
Total	224	614	613	352	224	141	178	307	274	425	543	725	561
Elementary									258	401	459	592	411
High schools								2	16	24	84	133	150
Average length of school term (weeks):													
All schools	13.1	14.1	19.5	25.0	12.0	18.5	21.0						
One teacher								24	28	28	32	32	32
Two or more teachers								28	32	32	36	36	34

Biennial reports of the State Superintendent of Public Instruction, Kansas.

1/ No term of school reported by district clerk.

2/ Number of districts maintaining schools.

Festivities were planned long in advance for the eagerly awaited holidays. The celebration of the Fourth of July at Santa Fe in 1888 was attended by practically every resident of the county. It included a procession in the morning, dinner at noon, sports in the afternoon, and fireworks in the evening. 69/ The parade included delegations from all over the county, the Grand Army of the Republic Post of Santa Fe, the Knights of Pythias, and "a company of ladies and gentlemen" on horseback. Such celebrations and social gatherings - a contrast to the hardships of pioneer life - furnished an emotional outlet for the people.

Effects of Drought of 1893-97

The depopulation of the county during the drought of 1893-97 jeopardized the functioning of local government, economic agencies, schools, churches, and organized social life. The local government in particular did not adjust itself readily to changes in size of population. As it was difficult to collect sufficient taxes to meet the most necessary public expenses, all expenditures had to be drastically reduced.

There was a close relationship between size of population and number of business establishments (Fig. 13). The latter declined from 23 in 1890 to 9 in 1895 and to 2 in 1900. In Santa Fe the population declined from 800 in 1888 to 250 in 1895 and to 60 in 1896, but increased to 128 in 1900. 70/

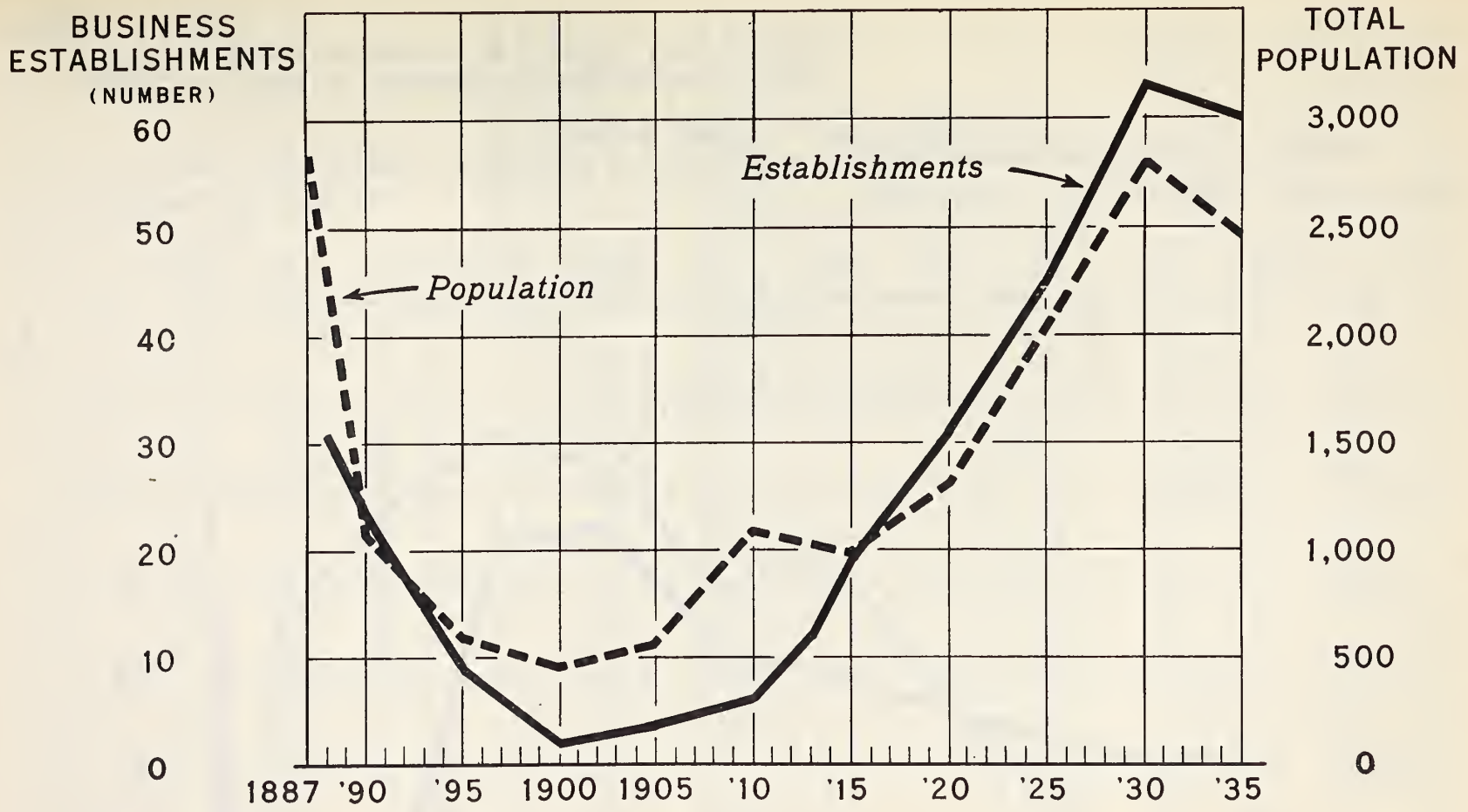
Although the population had declined to less than 500 by 1900, no change was made in county boundaries. The number of townships, however, was reduced from nine to three by an act of the legislature in 1897. 71/

The loss of population was a severe blow to the schools. The number of school districts declined only from 34 to 33 between 1890 and 1895 but had been reduced to 13 by 1900 (Fig. 14). The school term was shortened to an average of 13 weeks in 1895 whereas it had been as much as 25 weeks 5 years earlier. In 1897-98 the term was 5 months in Santa Fe, 72/ but was even shorter in the country districts.

An old settler reported that the school in his district was closed from about 1894 to 1896 and that school was held only at Santa Fe.73/ When the school was reopened in his district and only $15 had been allotted

---

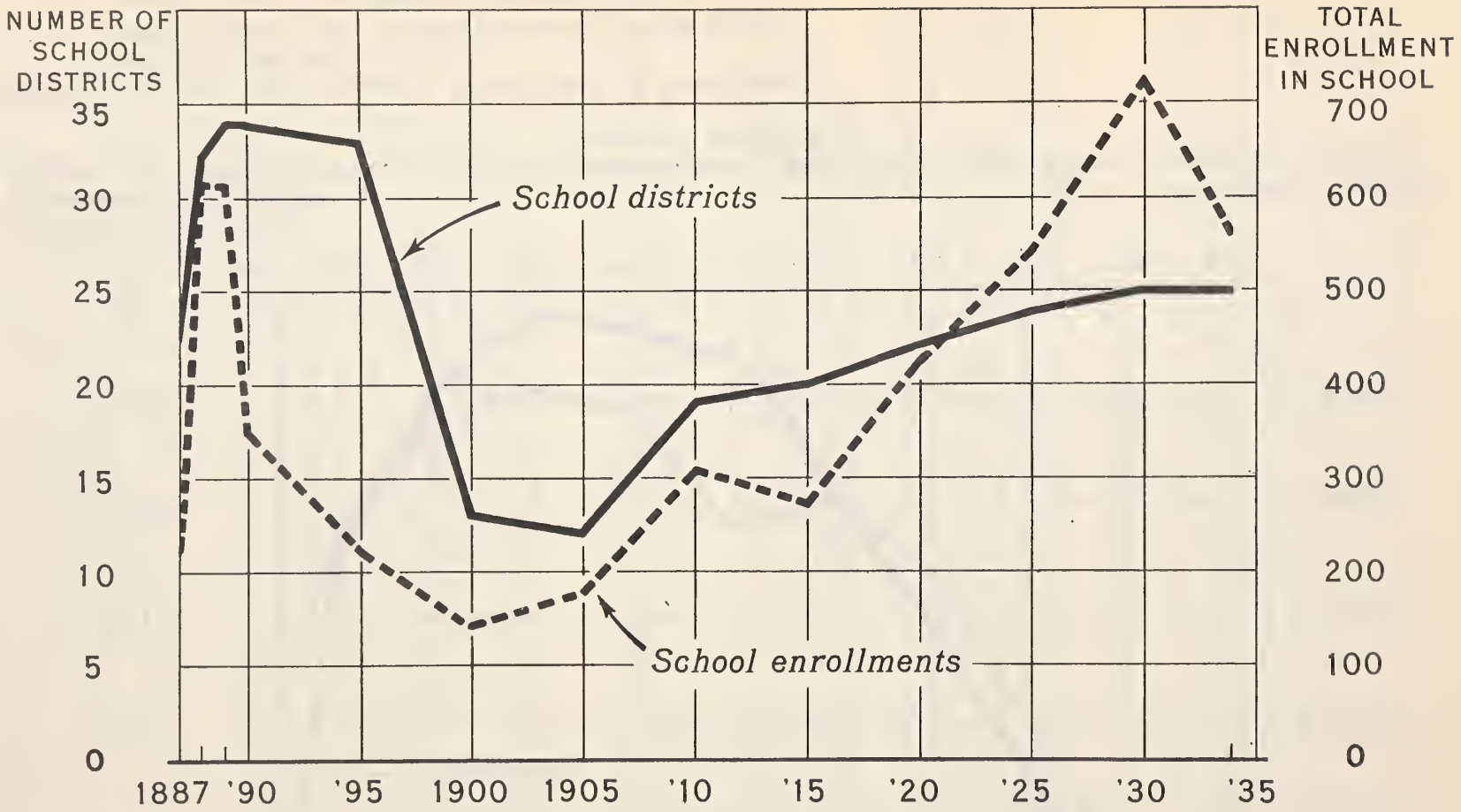
69/ Santa Fé Monitor, July 6, 1888.
70/ Reference Books of R. G. Dun and Co. Figure for 1900 is from the U. S. Census of Population.
71/ Biennial Report of the Kansas State Board of Agriculture, 1897-98.
72/ Santa Fe Monitor, August 5, 1897.
73/ Other old residents were under the impression that school was held in most districts throughout this period but that the length of school term was reduced.



U. S. DEPARTMENT OF AGRICULTURE NEG. 32835 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 13.- NUMBER OF BUSINESS ESTABLISHMENTS AND TOTAL POPULATION, HASKELL COUNTY, KANSAS, 1887-1935.

SOURCE: DUN AND BRADSTREET, DIRECTORY OF BUSINESS ESTABLISHMENTS
POPULATION DATA FROM BIENNIAL REPORTS OF KANSAS STATE BOARD OF AGRICULTURE



U. S. DEPARTMENT OF AGRICULTURE NEG. 32836 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 14.- NUMBER OF SCHOOL DISTRICTS AND TOTAL SCHOOL ENROLLMENT, HASKELL COUNTY, KANSAS, 1887-1934.

SOURCE: BIENNIAL REPORTS OF THE KANSAS STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

for the annual salary of the teacher, an informal arrangement was made whereby the children of a neighboring district attended that school for 2 months. At the end of this time, the school was moved to the other district but with the same teacher and with the same children attending. This means a term of 4 months was made available to the children of both these districts.

The crudeness of facilities for schooling during this period is aptly illustrated by the following item regarding a school teacher, recently retired from active service, who began teaching in the county 40 years ago:

> "Her first school was . . . constructed of sod with a dirt floor. That was in Haskell County in 1897 when she began her teaching career. There were no desks. Seats were home made. The blackboard consisted of boards a foot wide, nailed to cross pieces and leaned against the sod wall." 74/

The large celebrations, such as those that had previously been held on the Fourth of July, were discontinued because of the expense. Lodges were abandoned because of the difficulty of paying dues. The departure of many families also affected such organizations as singing schools, literary societies, and Sunday Schools. 75/ Informal gatherings and neighborhood visiting had to take their place. When parties were held, mush and milk frequently replaced the usual ice cream and cake. 76/

When favorable weather conditions returned, about 1898, a more active social life was resumed. The Old Settlers' Reunions started again, schools and churches took on new life, and dances and other forms of recreation became more frequent. As tax collection began to improve, more funds were available to finance schools and other activities of the local government.

Changes in Community Organization, 1900-36

Local Government

Interest in local government during the second decade of this period centered around a renewal of the contest for the county seat.

74/ Sublette Monitor, Sept. 9, 1937.

75/ Sunday Schools were maintained in Santa Fe and in some of the rural districts. It is not known positively that any resident pastors remained in Santa Fe and the fact that all of the funerals between 1894 and 1900, noted by the writer, were conducted by non-resident ministers or lay persons, indicates that probably no ministers lived in Santa Fe.

76/ This was reported to be a fairly common refreshment. A dance, at which mush and milk were served, was reported in the Santa Fe Monitor as late as March 1, 1900.

Fights for the county seat, so characteristic of Kansas counties during their early settlement, had been considered a relic of pioneer days until the struggle broke out anew in Haskell County. The railroad constructed through the county in 1912 missed Santa Fe by about 7 miles and Sublette, one of the two towns established along its right-of-way, began at once to agitate for the court house. Santa Fe, having declined in population from 128 persons in 1900 to 75 in 1910 and to 25 in 1920, 77/ would have lost the fight very shortly had it not been for the support of partisans of Satanta, the other railroad town. The latter village had no immediate prospects of securing the county seat, but its citizens thought they might have a better chance later if it remained for a time at Santa Fe. The struggle continued to figure in local politics for years and was twice before the legislature. One State representative was elected on the platform of securing a special Act of the Legislature to permit the moving of the county seat by a vote of three-fifths of the inhabitants.78/ Partisans of Sublette controlled the Board of County Commissioners and they refused to levy adequate taxes for the support of the county high school at Santa Fe. The fight was carried to the courts and legal proceedings came before the Kansas Supreme Court. Sublette finally won the right to the county seat in 1920, 79/ 8 years after the railroad was completed.

There was no change in township or county boundaries during this time. The relative prosperity and the steadily increasing population, combined with the contest for the county seat, forestalled any demand that might have arisen for consolidation of counties due to improvement in means of transportation and communication.

Trade and Service Agencies

The increase in population and the commercialization of agriculture during this period brought expansion in the number of business establishments (Fig. 13, p. 73). This increase was slow during the first decade after 1900 but was more rapid after the completion of the railroad.

In Santa Fe, which never quite recovered from the effects of the 1893-97 drought, there remained in 1900 only a general store and a newspaper. As the county population increased, the number of establishments increased to 5 in 1910 and 8 in 1912. But most of these were moved to the new towns located on the railroad, and when the county seat was finally changed to Sublette in 1920, only 2 remained. Santa Fe was officially vacated in 1926 and today only a filling station, a schoolhouse, and wheat fields mark the location of another "ghost town."

77/ Reference Books of R. G. Dun and Co. Figure for 1900 is from U. S. Census of Population.

78/ Topeka Capitol, May 16, 1919. This newspaper clipping is in Haskell County file of the Kansas State Historical Society.

79/ Topeka Journal, December 11, 1920. Newspaper clipping in Haskell County file of the Kansas State Historical Society.

Agencies having to do with the raising and marketing of wheat accounted for a considerable part of the increase in the number of business establishments in the county. The first elevator was built in 1916; 80/ there were 7 in the county in 1930. With the development of power farming, various concerns sprang into existence to supply tractors, combines, listers, and other implements. Garages, filling stations, and oil companies were established to furnish repairs and fuel for both automobiles and tractors. In 1920, there were 31 establishments but this number increased to 45 in 1925 and to 63 in 1930. At the latter date 31 agencies were located in Satanta, 31 in Sublette, and 1 in the open country.

Another significant development was the organization of cooperatives for the marketing of wheat. Cooperatives were organized in both Sublette and Satanta about 1929. As early as 1916, some farmers in the eastern part of the county had been members of the Cooperative Equity Exchange of Copeland (just outside of Haskell County) which became the largest farmer-owned and farmer-operated elevator in the world. The cooperatives at both Sublette and Copeland were mismanaged in the past but more stringent rules for the keeping of accounts have been adopted since then.

Schools

Following the improvement of school systems throughout the country, Haskell County increased its school facilities during this period. The growth in number of school districts from 13 in 1900 to 22 in 1920 was made possible by the mounting school enrollment (Fig. 14, p. 74). The larger number of schools decreased the distance that the children had to travel. School terms were lengthened and high schools were established.

One year of high-school work was offered as early as 1910 in Santa Fe, but 10 years elapsed before 4-year high schools were placed on a satisfactory basis. A county high school was opened in Santa Fe about 1913 but the rivalry for the county seat interfered with its support.81/ Beginning in 1913, a high-school course of 1 year was offered in Sublette also. This was increased to a 2-year course in 1918 and to a 4-year course in 1919. Satanta offered 1 year of high-school work in 1914 and later a full 4-year course, beginning with the school year 1920-21. When the court house was finally moved to Sublette in 1920, the high school at Santa Fe was discontinued and new high-school buildings were erected in Sublette and Satanta. During the following decade the enrollment in each of these increased rapidly (Table 17, p. 63), the quality of instruction showed marked improvement, and the curriculum continued to expand.

80/ Collins, John M., Haskell Rises to Renown, Supplement to the Sublette Monitor, June 12, 1930.

81/ Kansas City Journal, August 12, 1915. Newspaper clipping in the Haskell County file of the Kansas State Historical Society.

Organized Social Life

The prosperity of this period was reflected in the formation of many new organizations with cultural, recreational, religious, or educational aims as well as in the improvement of existing ones. Organized social life developed slowly during the first decade of this period, especially in the rural districts. The annual Old Soldiers' and Old Settlers' Reunions which had been held first in 1898 were continued during the early part of this period and were attended by nearly everyone in the county. The Sunshine Club, organized for social purposes by rural women of the northwestern part of the county in 1909, still survives. An I.O.O.F. Lodge was organized in Santa Fe the same year and later transferred to Sublette. The churches, Sunday Schools, young people's societies, ladies' aids, and other church organizations have been active social gatherings connected with the various church groups making up an important part of the social activities in both villages and rural areas.

Church membership has kept pace with the growth of population, increasing from 149 in 1906 to 238 in 1916 and to 509 in 1926. It includes two Mennonite congregations, established by leaders of these groups upon their arrival in the county. The people of this sect have not joined social organizations existing in the county but live somewhat apart. As their participation in community activities is limited to what is consistent with their religious teachings, their social life is largely confined to their own church and Sunday School, and informal visiting among themselves. The effort to maintain the unity of their group life extended to the establishment of a parochial school that has since been discontinued because of decreased incomes.

The villages developed a rather active and highly organized social life, especially during the decade 1920-30, and many clubs with national affiliations were started. A number of women's clubs were organized with memberships largely confined to the villages although extended in some instances to farms. Organizations for men include the Masons, I.O.O.F., and the American Legion. The Sublette Community Club for business men, started in 1926, was discontinued in 1935. Organizations of the Girl Reserves were started in the high schools about 1929, and somewhat later the Y.W.C.A. was organized to act as a sponsor for the younger groups. The purpose of all these clubs was civic betterment, educational and cultural improvement, and recreation. Two of the women's clubs were instrumental in organizing and maintaining public libraries in the county during many years. Parent-Teachers' associations were organized in Sublette in 1929 and in Satanta in 1935.

A Grange, established in the northwestern part of the county in 1931, was the first farmers' organization in the county, with the exception of the grain cooperatives that had been started only shortly before. Parent-Teachers' associations were formed in five rural districts - four in 1934 and one in 1935. One of those started in 1934 held meetings for only 1 year but the others continued to function during 1936.

There are no moving-picture theaters in the county but movies were shown in the grade-school building in Sublette during the fall of 1936. Residents usually attend movies in Garden City or Liberal, each about 35 miles from Sublette. Every Saturday night except during the summer months a theater in Satanta offers a play given by a commercial company. Entertainments and plays given by the schools are well attended. Commercialized recreation is less important than in urban centers, and clubs enjoy a greater popularity.

Effect of Drought of 1932-36

The drought of 1932-36, in great contrast to that of 1893-97, affected formal community activities only slightly; in some respects these had become better organized. The explanation for this lies not only in the fact that the drought brought the people closer together by encouraging cooperative effort in meeting their common problems, but largely in the extent and effectiveness of the Government assistance that has been rendered.

As the problems arising from the depression, drought, and subsequent dust storms have been too great for the local government to handle, cooperation with larger units has been necessary. The functions of the county have altered and it has become, to a large extent, an instrument for the administration of State and National programs. Relief has been dispensed with the cooperation of the County Commissioners and has required only a relatively slight adaptation of the local government. The farm programs, however, have been established outside the existing county set-up and are not responsible to the local authorities. The Agricultural Adjustment Administration, Farm Credit Administration, and Farm Security Administration work directly with the farmer or with committees of farmers and not with the Commissioners. The only connection with the county government is through the County Agricultural Agent. The administration of the farm programs rendered more urgent the need for a county agent and this appointment was made by the County Commissioners upon the suggestion of the district representative of the Farm Bureau.

The County Agricultural Agent was hired in 1934 and a Farm Bureau was organized at that time. Since the County Agent is associated with the Farm Bureau which, in turn, is the agency through which the Extension Service of the Kansas State College contacts rural areas, this action was of considerable significance. Women's auxiliaries of the Farm Bureau have developed and the work of the 4-H Clubs for farm youth has been extended. This is particularly important in Haskell County because courses in agriculture are not included in the curriculum of the high schools. The women's organizations of the Farm Bureau are found in each local community of the county and serve as educational and social agencies. In the northwestern part, most farmers belong both to the Grange and to the Farm Bureau; in this case most of the social activities are carried on by the Grange. In other parts of the county the Farm Bureau has sponsored "community meetings" - primarily recreational gatherings

but with certain educational features. These meetings are open to all members of the community, most of whom are already members of the Farm Bureau.

The churches were hard hit through the decreased farm incomes. But interest in church activities has been maintained and attendance has recently shown an increase. Other organizations in the village were retained and several new ones formed. In the fall of 1936, a branch of the American Legion and an additional social club for women were established in Sublette.

Community activities benefited also because people spent less for commercialized forms of recreation and attended movies in the cities less frequently. Families turned their attention to the development of recreation in their own communities. This tended to make the programs of the Farm Bureau and Grange more attractive than they would otherwise have been. Then, too, the development of such organizations, retarded at first by the high mobility of the population, would undoubtedly have been effected by the relative stabilization that occurred in later years, regardless of other factors.

Schools in the county were affected only slightly. Teachers' salaries were considerably decreased as a result of the depression but probably no more than in other parts of the country not affected by drought. Some school districts were combined, and others sent their pupils to nearby schools, but most of the teachers were retained. The process of combining, especially in small districts, is likely to continue but its effects are beneficial. Items in the local paper indicated that school would not be held in three districts in 1937-38 because only 4, 3, and 1 pupils respectively had been registered, but these pupils were to be transported to other districts, leaving the county with only 18 rural schools. 82/

The number of business establishments (Fig. 13, p. 73) reflects somewhat the decrease in farm income which occurred after 1930. The number increased from 64 in 1930 to 74 in 1931, remained stationary for a year, and then began to decline. There were 68 in 1933, 61 in 1934, 60 in 1935, and 57 in 1936. 83/ This year-by-year inspection of the number of agencies shows that they were affected by the drought and depression but not nearly so severely as during the preceding drought of 1893-97.

82/ Sublette Monitor, May 6, 1937, and September 9, 1937.
83/ Dun and Bradstreet, Reference Book, for the first quarter of each year, 1930-36.

Chapter VI

RELIEF AND ASSISTANCE

The governmental assistance received during the recent drought has not been an entirely new experience to the residents of Haskell County. From time to time aid has been dispensed to relieve the distress of the inhabitants but during times of great stress has not been confined to direct relief. Benefit payments made in the last few years have their counterpart in payments made during the drought of 1889 when farmers were compensated for plowing their own land and all section lines were bought by the local government for roads. Thus the primary object of assisting farmers when other resources have failed has been attained without a sacrifice of morale.

Local Aid to Settlers

The county had hardly been organized before there was considerable demand for aid. When crops failed in 1887 "poor" relief was given to all families who requested it. But the need continued through 1888 and by the spring of that year the people were in such hard circumstances that they petitioned their commissioners to send out a call for aid "to the Christian people and charitably inclined of Kansas and Kansas City," mentioning the fact that they did not want to appeal to people outside the State. 84/ A carload of flour, bought by the county, was distributed among the needy and, during 3 of the first 6 months in 1888, $1,000 was paid out to "paupers" by the trustees of the various townships who were overseers of the poor. 85/ This expenditure brought a protest from the taxpayers who requested that economies be made in dispensing relief, but the demand for economy was more than offset by the growing distress of the inhabitants.

In the summer of 1888 the small wheat acreage produced a good yield and nearly every settler wanted to plant a crop the following year. The local paper reported that farmers were willing to give one-fourth or even one-third of the crop to anyone who would furnish wheat for sowing, and commented: "Wheat is a sure crop in this country and there is a good opportunity for speculation here offered." 86/ As it was impossible for all families to get seed wheat, a petition was circulated by the settlers asking the county commissioners to buy wheat and corn for seeding purposes and in return to collect a share of the crop. 87/ This petition was not granted but the demand for assistance continued.

84/ Tyler, A. G., Haskell County in the Making, Supplement to Sublette Monitor, June 12, 1930.
85/ Santa Fe Monitor, July 20, 1888.
86/ Santa Fe Monitor, September 7, 1888.
87/ Santa Fe Monitor, August 3, 1888.

The most extensive relief and assistance was provided during 1889 because of the complete failure of the crop. On January 14 of that year, a petition was sent to the Board of County Commissioners, signed by 346 resident taxpayers, requesting assistance as follows:

> "We, the undersigned, taxpayers and bona fide residents of said county, to retain our residence and to put in crops the coming season, find it necessary to have employment.
>
> "THEREFORE, We petition your honorable body to make the following order, to wit:
>
> "That for each acre of sod broken in said county by actual settlers between January 15, 1889 and June 30, 1889, you pay to the party or parties, as a compensation for said work, the sum of One Dollar ($1.00) per acre." 88/

Assistance given that year included direct relief for groceries or the purchase of seed, payments to settlers for plowing their own land, and the purchase of section lines for public highways. Early settlers report that each family who would accept it was given a grocery order worth $10. The county issued scrip for the purchase of seed (locally known as "seed aid") so that families who might otherwise be forced to leave the county could plant crops. 89/ Permitted by a special Act of the Legislature, the payment of $1 per acre for all sod broken out, up to a maximum of 40 acres per family, was a direct subsidy. The local paper reported that some families were not strictly honest in claiming payments for broken sod; in one case, the acreage actually plowed was less than the amount of the claim filed, and in another, the farmer secured two sets of witnesses and filed his bill twice for the same land. One of the county commissioners requested the local paper to warn those "so disposed" to be careful in the future.90/ Also by authority of the State legislature, roads were established on each section line and $25 damages were allowed for each quarter section of deeded land and $20 for homesteads and tree claims.

As the payments for section lines and for breaking sod were not considered in the same light as direct relief, nearly all residents of the county availed themselves of these subsidies. Nevertheless, many left the county.

As conditions began to improve with good crops in the years 1890-92, the necessity for relief diminished. According to records of the Board of County Commissioners very little aid was given after 1890 and on April 15, 1891, more stringent rules were adopted: "It is hereby resolved by

---

88/ Journal of County Commissioners, pp. 142-143.
89/ Santa Fe Monitor, April 12, 1888.
90/ Journal of County Commissioners, October 9, 1889.

the Board of County Commissioners in regular session that from and after this date no account shall be allowed for the maintenance of any person in this county who is or may be proven to be able to work and make his living or who is not a pauper, as understood by that term, and the township trustees are hereby notified not to issue orders for any person for provisions, fuel, or otherwise, unless the provisions of the Statutes have been complied with. Nor will this county pay for services of overseers of the poor except for services actually and necessarily rendered." 91/ Subsequently, the empty county poorhouse was closed, "it not being deemed advisable to longer maintain it awaiting occupants." 92/ The local paper expressed pride in the fact that the county had so far handled its relief problem without requesting outside help.

When crops failed in 1893, there was a suggestion that a special session of the legislature be called to provide seed for farmers in certain counties of the western half of Kansas. This proposal was opposed by the local paper:

> "Such talk should not be countenanced. It would do the county receiving such aid vastly more harm than good. In Haskell County, most people either have or will raise their seed wheat and those who are not able to buy will be supplied in some way by their neighbors and friends. It [Haskell County] neither asks nor expects outside aid. "93/

Although the drought lasted for 5 years practically no local relief was given, because circumstances made it impossible for the county to help residents during this period. The failure of the bank in 1894 (in which county funds amounting to about $15,000 had been deposited), the difficulty of collecting taxes, and the accumulated indebtedness of the county made it impossible for the local government to grant relief. Subsequently, little local relief was extended until the recent drought.

Since the beginning of the Federal relief program in 1933, the county has cooperated with this program and assisted in relieving the distress of its citizens. Aid has been provided for those who are not adequately cared for by the programs of the Federal Government, as well as for those who are ineligible for such assistance.

Provision of medical care is an important element of the local programs. A county physician is paid a salary of $500 out of local tax funds to give medical attention to those who cannot afford to pay for it, and in addition, payments are made to him in cases of childbirth and minor operations. On the prescription of the doctor the county furnishes medicine to relief and rehabilitation clients and to other needy families. Payment of a salary to a county physician is not a new policy; it was

---

91/ Journal of County Commissioners, April 15, 1891, p. 303.
92/ Santa Fe Monitor, September 1, 1894.
93/ Santa Fe Monitor, July 6, 1893, p. 2.

started soon after the county was organized. 94/

Beginnings of Federal Relief and Assistance

Although the Federal Government has given assistance in the Great Plains on a much larger scale during the recent drought than at any previous time, it has long been concerned with the development of this area. The provisions of the Homestead and Timber Culture Acts have been amended from time to time so as to make it easier for settlers who suffered the effects of drought to prove up on their claims. Direct relief and assistance were left entirely to local units.

Direct Federal assistance to farmers in distressed conditions was introduced during the drought of 1918-19. In certain sections of the West, loans were made to wheat farmers whose resources were exhausted from successive crop failures to enable them to continue their farming activities. 95/ The importance of this loan program lies not in the actual amount of assistance rendered but in the fact that it set a precedent for Federal aid during such crises. In 1919, the Government cooperated with other public agencies and individuals in moving cattle and sheep from a drought area in the northwestern part of the country to feed and pasture elsewhere. An official of the United States Department of Agriculture pointed out that it was a proper function of the Department not only to disseminate information but also to organize the resources of the area to prevent the consequences that would otherwise follow from a serious drought. 96/ Until 1931, crop and feed loans were made intermittently by the Federal Government to relieve distressed conditions caused by floods or droughts in certain areas. Beginning that year, such loans were made on a national scale to alleviate conditions caused by the widespread economic depression.

The Farm Program

The commercialized nature of wheat farming with its relatively large fixed costs rendered farmers of Haskell County, as well as of other parts of the Great Plains, particularly vulnerable to effects of drought. It has been shown in previous chapters that these farmers made every effort to meet their obligations, but they found the task increasingly difficult as the drought and depression continued. As the counties and States, faced with curtailed tax receipts, were totally unprepared to meet the widespread demand for assistance, several measures were adopted by the Government for the purpose of relieving distress, stopping foreclosures, and enabling operators to continue farming.

94/ Journal of County Commissioners, Oct. 7, 1889. Dr. W. F. Mills was selected as county physician to give his "services as medical attendant and furnish medicine to the poor of Haskell County, Kansas" for the sum of $125 per quarter for the year 1890.

95/ Yearbook of the U. S. Department of Agriculture, 1918.

96/ Ibid, 1919, pp. 403-5.

The Agricultural Adjustment Administration

The Federal program that played the most important part in Haskell County was that of the Agricultural Adjustment Administration because it affected directly or indirectly nearly everyone living there. From its inception in May 1933 it received practically unanimous support. The relatively large payments sent to Haskell County, amounting to $285,000 by the end of 1933 and averaging more than $450,000 per year for the period 1933-36, 97/ can be attributed to the large average wheat acreages of operators and to the high average yield for the base years, 1930-32. This was generally true throughout the wheat area of the Great Plains as well. Incidentally, these benefit payments provided a limited measure of crop insurance, for they assured a certain fixed income whether a crop was harvested or not.

Payments were made directly to farm operators and land owners who cooperated with the program. In 1936, about 90 percent of all farm operators were included. 98/ The spending of this money benefited all local business establishments and was largely responsible for the fact that nearly all taxes were paid on time, thus providing funds for the salaries of local officials, school expenses, and other local needs.

As about two-thirds of all land in the county is owned by non-residents and as about one-third of the farm operators are non-residents, it should be pointed out that more than 40 percent of the benefit payments have gone to persons outside the county. As has already been stated, 201 resident farm operators in Haskell and Seward Counties received an average of $812 in Government subsidies during 1936 (Table 15, p. 62). Benefit payments constituted the greater part of this amount.

The agricultural conservation program of the Agricultural Adjustment Administration succeeded the AAA's production-control program when the latter was declared invalid. Payments were continued to farmers on the basis of soil-conservation practices but Haskell County received somewhat less, or about $340,000, under the new program than under its predecessor. The continuance of these payments is contingent upon such appropriations as Congress may make in the future. A somewhat similar program has been provided for 1938.

The purchase of 1,072 cattle by the Agricultural Adjustment Administration during 1934-35 at a purchase price of $10,647 also tended to relieve the distressed conditions due to drought. Only 21 of these cattle were condemned; the others were purchased for use. In addition, farmers received $5,305 in benefit payments for reducing the number of cattle kept. 99/

97/ Records and Accounts Section, Agricultural Adjustment Administration.
98/ Sublette Monitor, February 11, 1937.
99/ Field Audit Section, Agricultural Adjustment Administration.

Farm Credit Administration

The banks of Haskell County did not fail but they were compelled to curtail credit, chiefly because land and machinery were rapidly depreciating in value. Moreover, in this county, farmers had never secured a great deal of credit from the local banks. Previous to the development of power farming, loans had been made to ranchers with livestock or land as security. Farmers who had bought tractors, combines, other implements, and fuel either paid cash or gave their notes to the implement and oil companies; the local banks did not finance these transactions. When the depression and drought set in, the implement and oil companies had large credits outstanding in western Kansas. Subsequently, the foreclosure of implements took place on a large scale until the companies began to realize that there was no sale for used machinery.

A series of acts were passed to enable farmers to borrow money from the Government, culminating in the Executive Order, effective May 27, 1933, which consolidated all Federal agencies dealing with agricultural credit under the Farm Credit Administration. This organization made loans of several types to farmers who could not get credit locally at reasonable rates: (1) Federal Land Bank Loans, (2) production credit, and (3) feed and seed loans.

The Federal Land Banks made loans to finance farm mortgages. This involved refinancing previous mortgages as well as making new loans. The farmer thus saved his farm from foreclosure or at a low rate of interest obtained additional cash on which to operate. In Haskell County, 244 loans involving $770,000 were made by the Federal Land Bank and the Land Bank Commissioner from May 1, 1933, through December 31, 1936. On the latter date there were 267 such loans outstanding in the amount of $828,700, including loans made prior to 1933. 100/

Production Credit Associations furnish short-time credit to farmers and stockmen for general agricultural purposes including the production and harvesting of crops, the grazing of livestock, purchase of livestock and equipment, repair of farm buildings, or for the refinancing of indebtedness previously incurred for such purposes. As of December 31, 1934, the rate charged borrowers by Production Credit Associations was 5 percent. 101/ All loans made by Production Credit Associations were required to be adequately secured and to provide for liquidation at maturity.

Beginning in 1932 and continuing each year up to the present time, farmers in Haskell County have received additional financial assistance in the form of crop and feed loans, which are administered by the Emergency Crop and Feed Loan Section of the Farm Credit Administration.

These loans are customarily made available by annual appropriation of Congress for the purpose of financing the fallowing of land, the production and harvesting of crops, and the purchase and production of feed for livestock. This type of loan has always been made on a secured basis,

---

100/ Statistics Section, Farm Credit Administration.
101/ Second Annual Report, Farm Credit Administration, 1934, pp. 54-55.

(1) loans for the production of cash crops being secured by a first lien on all crops financed by the proceeds of the loan, and (2) loans for the purchase or production of feed for livestock being secured by a first lien on the livestock to be fed. A fixed policy has been followed of restricting the loans to farmers who cannot obtain loans from other sources and of limiting the loans to the actual amount needed by the applicant to finance his crop and livestock operations.

The number of crop and feed loans made in Haskell County for the period 1932-36 was 1,407, totaling $318,188. These loans proved to be one of the most effective measures of assisting Haskell County farmers during this period. On November 12, 1938, 1,139 loans were outstanding and the unpaid amount was $242,116.65. Thus, in spite of drought years, 24 percent of the amount loaned had been repaid.

In addition to secured crop and feed loans, the Emergency Crop and Feed Loan Section made a number of drought feed loans to Haskell County farmers during the drought period 1934-35, such loans being authorized by an Act of Congress approved June 19, 1934, appropriating $525,000,000. Of this sum, $96,785,000 was earmarked to the Governor of the Farm Credit Administration for drought feed loans.

These loans were made principally for the purpose of caring for cattle and other livestock in areas seriously affected by the drought, and enabling livestock producers to conserve their foundation herds. The loans were made on the basis of the borrower's unsecured note and a non-disturbance agreement given by all holders of liens on the chattels and other livestock to be fed.

The number of drought feed loans made in Haskell County during 1934-35 was 39, totaling approximately $5,938. The appropriation authorizing these loans expired June 30, 1935. As of November 12, 1938, 30 loans were still outstanding, and $4,335.90 had not been repaid. 102/

Relief and Rehabilitation

Farmers in Haskell County who operated more extensive acreages usually had more cash in reserve and soon received benefit payments from the Agricultural Adjustment Administration which were large enough to obviate need for further financial assistance; also, they were more frequently able to use the credit facilities offered by the Farm Credit Administration. But as farmers who operated small holdings had operated on a narrower reserve margin and received proportionately smaller benefit payments under the program of the Agricultural Adjustment Administration for curtailment of crop acreage, some of them were compelled to apply for relief. Because the low prices for farm products left inadequate funds with which to pay for even the necessary farm labor, there was little chance for the farm hands. This group completed the picture of farm distress. The need for relief was so widespread that neither local government nor private charities such as the Red Cross could cope effec-

102/ Statistics Section, Farm Credit Administration.

tively with the problem. Moreover, with the whole country in the throes of the depression, there was scant opportunity for work elsewhere so the people of Haskell County were not likely to improve their situation by emigrating.

The first Federal relief reached Haskell County in 1932 when the county received an allotment of $1,077. This was a part of a relief loan made by the Reconstruction Finance Corporation to the State of Kansas to care for the unemployed. In May 1933 the program of the Federal Emergency Relief Administration was inaugurated in the county and during the first month 75 families were on its rolls.103/

In the drought area direct relief to farmers was supplemented by assistance in buying feed for livestock. From December 1933 to March 1, 1934, the Civil Works Administration gave employment to relief clients as well as to other unemployed persons. Subsequently, the Civil Works Administration was discontinued and the number of families on relief increased. From March 1934 to May 1935 inclusive, the number of cases averaged 162 families which included 727 persons, or more than one-fourth of the total population. The average monthly expenditure during this period was $4,976. 104/

In November 1934 another phase of the Federal Emergency Relief Administration program was inaugurated in Haskell County. The program of the Rural Rehabilitation Division, which had been organized to make loans to destitute farmers to enable them to become self-supporting on their own farms, was extended to the drought States. As the farmers were unable to repay the loans, they were given an opportunity to liquidate their indebtedness by employment on work projects. From the beginning of the program until June 1936, 66 families in the county were given grants or loans totaling $3,513 - $1,038 for loans and $2,475 for subsistance grants.105/ In July 1935 the Rural Rehabilitation Division of the Federal Emergency Relief Administration was transferred to the newly established Resettlement Administration. Up to December 1, 1936, 35 families were given grants and 26 received loans by Resettlement Administration.106/

In November 1935 the work relief program of the Federal Emergency Relief Administration was superseded by the Works Progress Administration which provided employment with a monthly security wage rather than a relief grant based on the needs of the applicant. At the inception of this new program the Government terminated the granting of direct relief and those who were not absorbed by its projects again became the responsibility of local authorities. Since the beginning of the Works Progress Administra-

---

103/ Division of Research, Statistics and Records, Federal Emergency Relief Administration.
104/ Ibid.
105/ Ibid.
106/ Data from the local supervisor of Rural Rehabilitation for the Resettlement Administration.

tion program in Haskell County it has employed an average of 60 persons, the average monthly pay roll amounting to $1,734 up to June 1937 (Table 21). A number of these projects were for permanent improvements, including the construction of swimming pools, city parks and playgrounds, the improvement of roads and streets, and the operation of nursery schools and sewing rooms in the villages of Sublette and Satanta.

The National Youth Administration, an agency created to provide employment for persons 16 to 24 years of age, has given jobs to about 25 young men and women of the county. This agency furnishes only the salaries of the youth employed; the County Commissioners supply most of the necessary materials. In February 1936 the first project of this kind in the county was begun. School grounds have been improved and in Sublette the book collection of the public library has been catalogued and several hundred volumes have been repaired. In the two villages workshops

Table 21.- Number of persons employed and earnings on work projects of the Works Progress Administration, November 1935 - March 1937, Haskell County, Kansas

Month	Number of persons	Earnings
1935:		
November	52	$ 816
December	65	2,059
1936:		
January	64	2,001
February	62	2,151
March	75	2,103
April	72	1,840
May	66	1,598
June	49	1,514
July	43	1,110
August	59	1,365
September	75	1,946
October	68	2,211
November	63	2,166
December	65	1,976
1937:		
January	52	1,635
February	49	1,644
March	46	1,349
Averages	60	1,734

Division of Research, Statistics and Records, Works Progress Administration.

were opened to make toys for distribution at Christmas, but were retained after the holiday season to make articles needed in the schools and in county offices. Some of the young people have assisted county officials in routine clerical capacities and others have been helped to obtain private employment. In addition, aid has come to the young men of the county through the Civilian Conservation Corps, although there is no camp in the county.

In contrast to the experience undergone during the drought of 1893-97, aid has been forthcoming from both Federal and local sources to relieve distress. The county has carried its burden well in cooperating with Federal agencies and in caring for residents not eligible for these programs. During 1936 the amount of local funds spent for direct relief ranged from about $300 to $1,000 a month.107/ Furnishing the materials to carry on the Federal work-relief projects is another large expense to the county. As already pointed out, however, many of these projects are of permanent value to the community.

107/ Records compiled by Welfare Office of Haskell County, Kansas.

Chapter VII

ATTITUDES AND OPINIONS OF FARMERS IN THE DROUGHT AREA

Although somewhat intangible, an element of the frontier spirit remains as a factor in the community life within Haskell County. One of the more obvious manifestations is the relative informality of dress that has been generally characteristic of our Western frontier. The banker may exchange his white shirt for a leather jacket while he works in the bank or drives around the county to inspect his wheat fields. This informality is a superficial manifestation of the fact that customs are more easily subject to change than in more settled communities. The farmers are inclined to embark more readily on new ventures and with less discussion or debate than would be the case in communities farther east. One county official, who had been reared in the Middle West, stated that when he first came to the county, he was astonished at the rapidity with which proposals passed from the discussion to the action stage. This experimental attitude, necessary to survival, came the more easily to the rather adventurous persons who had been attracted to the community. This does not mean that license prevails. The citizens have always been law-abiding, for the most part, and a puritan influence is found in the emphasis on temperance, morality, and church going.

Vicissitudes of life in the Great Plains have created a social psychology peculiar to that area. Because attitudes and opinions influence action, it is important to know the attitudes of Haskell County farmers toward farming in this area and their opinions regarding the various Federal programs, in order to utilize such knowledge as a guide for future policy.

Attitudes Toward Farming

The great majority of farmers in Haskell County with whom the writer talked in the fall of 1936 agreed that, in the long run, it was as good a place to live and the chances for making a comfortable living there were as great as anywhere. One farmer remarked, "I like farming out here on a big scale, with tractors and combines. If you have a good crop you can make some money. I wouldn't farm any other place." These attitudes are characteristic of most farmers in the county, but may seem strange to those who have read about the droughts and dust storms of the Great Plains. The wide, level country, with its dry air and fertile soil, has a fascination for many of the residents. A few persons become discouraged and are alienated by the monotony of the landscape and the vagaries of the climate, but they usually leave at the first opportunity.

The necessity for taking chances has developed a speculative attitude while the promise of occasional bumper crops has attracted persons who are willing to gamble on the prospect of getting rich quickly. The fanciful hopes aroused - as reflected by the extravagant statements that have appeared in the local newspaper during all periods of pros-

perity - are based upon the frequent instances of large profits during a few years. Thus encouraged, farmers are led to expand their acreages and buy new implements to such an extent that they are ill-prepared for the next drought. A local official explained that this was and always had been a "long-shot gamblers' country." The uncertainty of farming in the Great Plains has inevitably been heightened by the dependence upon a single cash crop rather than upon a diversity of enterprises. Although raising wheat involves a great risk, it is highly profitable to farmers when crops are good and high prices prevail.

A difference of opinion exists among the farmers as to the extent to which crop failures can be prevented. Some say that anyone can raise a crop when there is a good year but that it is impossible to get a crop when weather is unfavorable, no matter what farming practices are used. Others think that if better methods were used, production could be greatly increased during both good and bad years. It is true that while some farmers have raised some wheat nearly every year during the recent drought, others have had complete crop failures for 5 years.

The attitude of these farmers is far from dogmatic. They are willing not only to accept methods that have been proven but also to experiment with new methods that offer a possibility of greater success. In spite of the tendency toward speculation, most of the farmers are interested in minimizing risks to a greater extent and insuring stability of income.

Attitudes Associated with Drought

Nothing discourages a farmer more than to watch his crops dry up when there is nothing he can do except to wait and hope for rain. One farmer said, "One hopes for rain out here so much that it hurts." Even when there is a single crop failure, the morale of the farmers is severely taxed. They become irritable and pessimistic and this is heightened when the drought continues for several years.

This attitude affects in turn the purchases of farmers. A local merchant said that when farmers came in to get coal during a dust storm they bought only a few hundred pounds, when they really needed at least a ton, and resented his suggestion of a larger quantity. An automobile salesman cited another instance. He had sold a new car to a farmer in the fall of 1936 but there was no written contract. A brief dust storm occurred before delivery, and the salesman had so much difficulty persuading the farmer to take the car, even though he had enough money to pay for it in cash, that it was a week before the transaction was completed.

The writer first visited Haskell County early in October 1936, just after a rainfall. The farmers were busy sowing wheat, and everyone was optimistic regarding the prospects for a crop the next year. Soon the fields were green and, except for piles of dirt along the fence-row and

noticeable erosion in certain scattered fields, there was no suggestion that the area had been in the grip of a 5-year drought. The local paper carried the statement, "Southwestern Kansas doesn't have a chicken in every pot and a car in every garage but it does have a gleam in every eye this year." 108/ The ability of these people to rise from despair to enthusiasm at what seems to be a slight excuse probably explains why they are able to stay in the county when the odds seem to be greatly against them. "If I can just hang on during these hard times," one farmer remarked, "I will get back on my feet as soon as we have one or two good years."

An editorial in the local paper expresses the feeling of many farmers:

> "Here on the High Plains the spirit of confidence and hope and well-being (due to the general improvement in agriculture) is reflected, although we have been without a major crop for five years. The irrepressible determination of the people is by way of justifying itself. There is no longer any question of defeat. There is, instead, some planning of how to spread the income from a promising wheat crop over the gaps of the last five years. No widespread splurging is included in these plans. A wheat crop will launch a new era of self-financed, systematic management of the High Plains - because since the last crop the farmers have been doing a lot of reading and the Government has been doing a lot of organizing." 109/

The prospect of a good crop has about as much effect on the attitude of the people as a good harvest.

> "'We're always long on wheat prospects', J. F. Moyer of Dodge City told a Kansas crop-weather seminar in Topeka. 'We're always talking prospects. When we have a bad crop, we forget about it and start discussing the next one. In fact, business is much better out there in the fall and winter when prospects are good than it is after a bumper harvest.'
>
> "In other words, southwestern Kansas illustrates the old adage 'hope springs eternal in the human breast'. We ourselves are glad this is so. We'd rather be buoyed up by hope year after year even if the incentive must be next year's crop than to be smug and content over this year's profitable crop. This Pollyanna faith may seem childish to people who are sure of returns every year, but out here it's as logical and matter of fact as the quirks of the weather." 110/

108/ Sublette Monitor, March 18, 1937.
109/ Sublette Monitor, Dec. 31, 1936.
110/ Sublette Monitor, editorial, Nov. 19, 1936.

Opinions Regarding Federal Assistance

The Farm Program

Federal assistance to farmers in Haskell County runs so counter to the individualistic tendencies of farmers generally - and in particular to those of the Great Plains, recently emerged from the frontier stage - that any program which involves regulation and assistance might be expected to incur strong resistance. But, typical of the rapid change in fundamental attitudes that can occur during crises, there was little evidence at the time of this study of the idea that farmers could manage their own enterprises successfully without cooperation. It had become apparent that outside assistance would be imperative if the farmers were to remain in the area and that the existing farming set-up was not adapted to prolonged drought.

The unanimity with which the farm program was accepted in this county as well as throughout the Great Plains, was due partly to the desperate circumstances in which the farmers found themselves in 1933. Then the benefit payments would be large to those who were willing to cooperate. The importance which farmers generally ascribe to the benefit payments of the Agricultural Adjustment Administration is indicated in the following remarks: "It was a lifesaver, the only thing that kept farmers here." Another declared, "With the drought I don't know how we could have gotten through without the payments."

A small minority of the farmers of Haskell County, although accepting benefit payments, expressed themselves as being opposed to the program because they thought it was not always well adapted to their farms and was an interference with their management. They sometimes said that it would have been better to do without such payments if they could have obtained enough credit elsewhere. With the return of more humid years, a slight increase in the number of non-cooperating farmers may be expected.

Farmers who agreed with the general purposes of the program of benefit payments frequently criticized the way in which it actually functioned. These criticisms were usually concerned with: (1) the fact that benefit payments were unduly favorable to those farmers who had not previously used soil-conserving practices; (2) the delay in announcing details of the programs so that farmers did not know far enough in advance what steps to take to comply with them; and (3) the value of certain recommended practices - for example, strip farming, or the planting of strips of row crops, alternated with summer fallowing.

It was apparent to all farmers that soil-conserving practices were of no avail if their neighbors failed to take similar measures. The pioneer background of the community became apparent in the direct action taken by farmers to protect their fields. The following incidents illustrate such measures and the extent to which they were condoned by the community.

One case was cited in which a non-resident operator, informed of the deplorable condition of his fields, failed to take corrective measures to prevent wind erosion. His neighbors went out in a body with various types of implements and proceeded to work his land. This effectively stopped the soil-blowing, but because the tractors operated at different rates of speed and went around each other the ground was temporarily unfit for cultivation.

In the spring of 1937 a Haskell County farmer listed about 100 acres of his neighbor's land without authority from the operator. The case aroused widespread interest and was expected to set a precedent as to whether one farmer might work another's land without permission. The jury, after long deliberation, declared in favor of the farmer who worked the land to halt soil-blowing, and assessed no damages. 111/

Another case was reported in which a farmer, without advising the owner, worked neighboring land to prevent soil-blowing. The owner arrived just as he was leaving the field, hired him to work more land, and paid him for what he had already done. 112/

Two definite expressions of public opinion indicate a growing demand that owners of land make every effort to prevent their soil from blowing. The first is a ruling by a local Agricultural Conservation Committee decreeing that farmers who fail to control soil-blowing will not be eligible for benefit payments; the second is the new State law empowering the Board of County Commissioners to work the land of such owners, charging the costs to their tax bills. 113/ In such ways have the farmers adopted a common means of action in addition to their acceptance of Federal assistance in meeting their problems.

The Relief Program

There is much diversity of opinion regarding the relief program. Farmers who had received relief at any time were generally in sympathy with the program and thought they had been treated with consideration. The Mennonites generally expressed the belief that it was better to get along without relief, if possible, but that it was a "good thing" for those who needed it. One Mennonite farmer who had domestic help furnished by the relief agencies when his wife was ill was very much impressed with this form of aid. Another farmer was well pleased with the fact that a dam had been constructed on his place by relief labor, and believed that this was a very desirable way to use relief labor. As he had no well or windmill, the dam was of great value to him, for it made a small reservoir for the storing of water which could be used for watering stock and for irrigating a small garden.

111/ Sublette Monitor, March 4, and March 11, 1937.
112/ Sublette Monitor, March 18, 1937.
113/ Sublette Monitor, May 6, 1937.

The attitude of farmers who had never received relief was different. Although they had usually received considerably more assistance in the form of benefit payments or loans, they did not consider these in the same category as relief. They were inclined to believe that relief was dispensed in too liberal a fashion and that some who were not in great need were receiving help. (It is interesting that this same criticism was voiced in Haskell County in 1888 when relief was being administered by the county authorities.) Others believed that those on relief would strive to remain on the rolls after their need had passed. But those who were receiving relief expressed the wish to be self-supporting again at the first opportunity.

Some farmers stated that employment by the Works Progress Administration ruined the morale of farm laborers. The relatively high wages paid for work relief, along with security of employment, shorter hours, and fairly easy work, made the men reluctant to leave such jobs. There was an administrative ruling to the effect that workers were to resume their jobs with the Works Progress Administration immediately after completing such temporary private employment as might be available. In actual practice it sometimes took several months before the worker could be reabsorbed on available projects. This situation undoubtedly made him hesitate to accept temporary farm-labor jobs. To prevent these projects from interfering with the wheat harvest of 1937 all projects of the Works Progress Administration were temporarily suspended. 114/

Although the general acceptance of the farm program reveals a change from the characteristic pioneer attitudes of individualism and independence of action, to a greater dependence upon and cooperation with the Government, it is probable that these attitudes will revert to a considerable extent when a return of favorable weather conditions decreases the need for outside aid.

114/ Sublette Monitor, July 8, 1937. Haskell was one of 14 Kansas counties in which Works Progress Administration projects were suspended during the harvest.

Chapter VIII

CONCLUSIONS AND RECOMMENDATIONS

The Drought Cycle

In Haskell County the type of farming, the size of population, and the whole set-up of community organization have tended toward what could be supported under the most favorable conditions that existed during the first and subsequent periods of greatest immigration. Cyclic periods of wet weather brought new streams of immigrants and there was a strong tendency to overdevelop the area. Under such circumstances the occurrence of a severe drought constituted a disaster of major significance to the community. In spite of the fact that droughts have been characteristic features of the climate, they have not been anticipated or planned for by the residents of the county who were eager to conclude, after a few good years, that droughts were a thing of the past.

The hypothesis stated in the Introduction, that social changes associated with drought tend to follow a definite sequence pattern,115/ has been substantiated by a variety of data regarding social factors involved in the development of this particular county:

> (1) A period of disorganization follows the onset of each drought. This is marked by an effort to maintain the established type of farming, standard of living, and community organization, but there is uncertainty and hesitancy as to farm practices, crops, and the advisability of leaving the region. Income and expenditures are reduced, some residents leave either temporarily or permanently, and each remaining farmer makes partial adjustments. There is no general agreement, however, and no uniformity of adaptation to the common problem of survival. The normal functions of local government are hampered by the difficulty in collecting taxes.
>
> (2) The continuance of the drought over a period of years forces communities to make more drastic adjustments finally worked out by the individual families and by the community as a whole. They lead to a decrease in size of population, fewer trade agencies, and a diminished emphasis on commercial forms of recreation. Assistance from local and Federal sources, in various ways, has

115/ This is a special case of the general proposition that all social change follows a definite pattern of development. See Carr, Lowell J., Sequence Pattern of Disaster, American Journal of Sociology, 1932, Vol. 38, pp. 207-218; and Phelps, Harold A., Principles and Laws of Sociology, 1936.

played an important part in the alleviation of the consequences of drought.

(3) The end of each extended dry period is followed by a readjustment to more favorable weather conditions. This phase has usually involved a period of relative prosperity and at times has amounted to a boom. There has been a consistent effort to bring the land under more extensive use, an expansion facilitated by mounting speculation in land and increased non-resident operation. After a time even the old settlers, who protested against the wholesale destruction of the prairie sod, were seized by the fever to plant more wheat on their own land but they did reserve a part of the native grass for pasture.

Probable Success of a Program of Adjustment

The question might be raised at this point as to whether an adjustment can be devised that will render the economy of the county less vulnerable to the effects of drought. Contriving such a program would involve the cooperation of farm owners and operators with local, State, and Federal agencies. Two or three good wheat crops with prices at approximately present levels would diminish the effectiveness of cash payments as an inducement to compliance with such a program and reduce the number of cooperating farmers. Those who contend that any attempt to make such an adjustment is futile can point to the monumental reports of Johnson 116/ and Powell 117/ whose recommendations were entirely disregarded. It should be remembered, however, that not only farmers but also the Extension Service of the Department of Agriculture failed to follow these reports. Until a few years ago they neglected the fundamental question as to whether the land was suitable for growing this crop. The situation is entirely different, at present, when problems of land use are the primary concern of the Extension Service.

In the opinion of the writer there is a good chance for the success of a program of adjustment on a sound basis. The population is likely to remain more stable in the future than during the period 1925-30, when the rapid rate of turnover and the large proportion of newcomers were largely responsible for the rapidity with which land was broken out. The experience of the recent severe drought is another important element in the situation favoring the success of such a program.

One obstacle to the effectiveness of a long-range program of

116/ See footnote 22, p. 30.

117/ Powell, J. W., Report on the Lands of the Arid Region of the United States, U. S. Geographical and Geological Survey of the Rocky Mountain Region, Government Printing Office, 1878.

adjustment lies in the fact that about two-thirds of the land is owned by non-residents of the county, for many of them do not understand farming and are entirely unfamiliar with conditions in western Kansas. But from the point of view of such owners, there is the additional consideration that the supervision of wheat growing is much easier than that of a more diversified farming. The competition for land, especially during good times, gives owners the power to make decisions regarding land use that might more appropriately be left to the operators. It has already been pointed out that non-resident owners had an important influence in the breaking up of sod. The long-time interests of these owners would lead them to cooperate with a program of soil conservation but the fact that they are scattered throughout the nation makes difficult the task of enlisting their cooperation.

Federal Subsidy and the Future of the Great Plains

The extent of Federal subsidy to Haskell County, Kansas, during the recent drought makes appropriate some discussion of Federal aid in relation to the county's future. Although the great bulk of Federal expenditures (consisting of benefit payments, relief, and farm loans) were not specifically for drought relief, such aid was effective in stabilizing the farming economy on a higher level than would otherwise have been possible, judging by the series of events during the drought of 1893-97. Moreover, the cattle-purchase program of 1934-35 and the drought feed loans of the same years were measures specifically designed to relieve drought distress among the farmers. These special appropriations were in addition to an extremely liberal policy in the granting of relief and making loans, and the fact that benefit payments per farmer were unusually high.

As compared to a completely laissez-faire policy, which would involve no public subsidy to alleviate the disrupting effects of drought, the present policy has prevented extreme social disorganization that might otherwise have been expected. The migration of greater numbers would have increased the burden upon the communities to which they moved and their chances for making a satisfactory adjustment in these areas would have been lessened still more with the increased competition for such places. It seems reasonable to suppose that the speculative boom which would ordinarily follow the return of more favorable weather has also been largely avoided. Such results tend to justify the present policy, at least as an emergency measure.

In a completely planned economy it seems likely that such areas as Haskell County, in which there are the widest fluctuations in production, would be retired from wheat growing. A good crop frequently coincides with a bumper crop for the Nation as a whole (although an exception to this rule was the year 1930 when good crop yields in Haskell and other counties of the Great Plains were associated with widespread

drought in other parts of the country). A reduction of acreage to secure benefit payments has little or no effect on wheat production during drought years when the crop is almost a complete failure; during favorable years wheat production in this area merely serves to increase the national surplus.

In a planned economy there would be, presumably, opportunities for farmers not needed in the area to engage in farming in other places or to secure employment in industry. As such conditions do not prevail at the present time, continued subsidy and the tendency to instability of production must be weighed against the cost of regrassing the land and of resettling the people elsewhere, as well as some estimate of the unwillingness of these people to move to other areas.

Recommendations

Recommendations of this study to avert the most disastrous effects of future droughts are presented on the assumption that neither a completely laissez-faire nor a completely planned economy will prevail. Certain proposals regarding the areas which have already received consideration will be discussed, together with other suggestions based on the present study. Some of the suggestions are applicable regardless of the effects of recurrent dry periods but assume more importance when considered in the light of these.

Land Use and Resettlement

The proposal that there should be certain changes in land use in the Great Plains is generally agreed upon, but there is considerable difference of opinion regarding the nature and extent of such readjustments. The Program Planning Division of the Agricultural Adjustment Administration issued in December 1936 a preliminary report, "Recommended Adjustments in Land Use for the North Central States," presenting recommendations of two groups of workers for the distribution of farm land between selected uses in the interest of soil conservation.

One of these groups consisted of the staffs of State agricultural experiment stations working in 1935 on the Regional Agricultural Adjustment Project, in cooperation with the Program Planning of the Agricultural Adjustment Administration and the Division of Farm Management and Costs of the Bureau of Agricultural Economics. The other consisted of the committees of farmers who cooperated in the spring of 1936 on the County Agricultural Adjustment Planning Project with the State and Federal Extension Services, the Program Planning Division of the Agricultural Adjustment Administration, and the Division of Farm Management and Costs of the Bureau of Agricultural Economics.

The recommendations of the County Planning Committees are the adjustments which such committees thought desirable to promote soil con-

servation in their counties. Although the recommendations of the first group contain some adjustments other than for soil conservation, in most areas this item accounts for practically all the adjustments suggested.

For the area in which Haskell County is located neither group advocated a decrease in the total crop land. The 1930 Census reported 67 percent of the total area in crop land, the Regional Adjustments recommendations made no change, while the County Planning Committees recommended an increase of 1 percent. With respect to harvested crop land the Regional Adjustment recommendation was 44 percent and that of the County Committees 48 percent as compared with the 1930 Census figure of 59 percent. The percentages recommended for harvested crop land to be planted in wheat were 68 by Regional Adjustment and 70 by the County Committees as compared to 78 in the 1930 Census. Thus the chief recommended change, according to this report, is a decrease in harvested crop land, probably to be accomplished by an increase in summer fallowing.

No official recommendation regarding the amount of land which should be put back into grass over a long period of time has been released by any official governmental agency. The County Committee of Haskell County, Kansas, suggested 10,000 acres. Unofficial estimates which may not be quoted in this report, although considerably larger than this figure, do not contemplate any radical change in the farming economy.

Thornthwaite's suggestion 118/ that a considerable proportion of the land should be returned to pasture and that cattle raising be made an important part of the farming enterprise involves a more drastic change in the farming economy. He estimated that, although 36,000 families had emigrated between 1930 and 1934, at least 59,000 of the remaining families would have to leave the drought States if the needed adjustments in land were to be effected. The practicability of this suggestion was questioned in another report 119/ on the grounds that settlement techniques had not been perfected to such a stage that the resettlement of 59,000 families could be readily effected and that public opinion would probably resist any policy of evacuation. It was also argued that such a program would receive little support within the area itself, and migrants from this area with small resources would probably not be welcomed elsewhere. However, it seems probable that a policy of restricting immigration into the drought States might conceivably reduce the population by 59,000 families over a period of years.

Thornthwaite's suggestion, however, is open to question from another point of view. Much of the Great Plains is not covered by grass sod. In Haskell County, about 90 percent of the land in farms is broken out,

---

118/ Goodrich, Carter, and others, Migration and Economic Opportunity, University of Pennsylvania Press, Philadelphia, 1936, chapter V., pp. 202-250. This chapter was prepared by C. Warren Thornthwaite.
119/ Taeuber, Conrad, and Taylor, Carl C., op. cit., p. 5.

according to the United States Census of Agriculture. Moreover, the grass land that remains is chiefly concentrated in certain sections of the county. It would be no small task to re-sod large areas, at any time, and this would be impossible during years of deficient rainfall. Moreover, if the program were carried on during humid years when it would be technically possible, there would be sufficient rainfall to raise abundant wheat crops and the opposition to such a wholesale change in land use would then be enormous.

A greater part, if not all, of the needed adjustment in land use could be made on the basis of the present population. The net emigration in the near future is likely to be slight unless crop failures continue. But there is need for restricting immigration during good years to what can normally be supported by the resources of the area.

Resettlement opportunities are urgently needed for the large number of drought-area farmers who are stranded in the Pacific Coast Area 120/ and for other families who might later be forced to leave the district. Available data indicate that many of those who emigrated have been worse off than those who stayed.

The major crop in Haskell County, as well as in large sections of the Great Plains, will continue to be wheat. This conclusion is shared by residents of the region, members of the Kansas State Board of Agriculture, and members of experiment station staffs who have studied the problem and are familiar with the advantages, as well as the drawbacks, in growing wheat there. But a considerable acreage, possibly as much as 10 to 20 percent of the present crop land, should be returned to grass, and an increased diversification of crops should be encouraged. The adjustment will be more radical in counties farther west which have an even smaller rainfall but also have most of their land under cultivation. In Haskell County the greatest change is likely to be a wider application of such practices as summer fallowing, contour farming, and other measures to conserve moisture and control soil blowing, as well as greater diversification.

Changes in the Farm Program

Farmers in Haskell County, as well as in other parts of the Great Plains, have the problem of raising a crop, emphasized by the recurrent droughts, and of getting a reasonable price for it. The harvests vary from bumper crops to complete failures. A satisfactory plan of crop insurance, as a method of distributing the bumper crops over lean years, appears to be the most important suggested change in farm legislation. If wheat farming will pay in the long run, such a plan would largely remove the future need for emergency drought relief.

120/ Newspaper articles indicate that many of these families in California were living in very distressed circumstances without adequate food, clothing, or shelter in the spring of 1937. See United Press dispatch in Washington Herald, August 15, 1937, p. A-5.

Securing a reasonable price for produce is a problem common to farmers in all parts of the Nation. The plan generally advanced is that of controlling production on farms, as already applied to many fields of industry. The important objective is the securing of a parity of agricultural and industrial prices. A lessening of monopolistic and quasi-monopolistic controls in industry might achieve the same goal. It is not the function of this report to suggest which method of bringing about a parity of prices should be used.

Benefit payments for soil-conserving practices seem to be justified as an emergency measure during a crisis or to subsidize certain practices that are not economical from the viewpoint of the farmer but that have a public benefit over and above that which accrues to the individual. These benefit payments have operated to reduce the acreage of certain basic crops by replacing them with soil-building crops.

Certain criticisms of the Federal farm program made by farmers of the county (see chapter VII) appear to merit some consideration. The lack of coordination of the efforts of various agencies designed to aid farmers is probably justified during an emergency but should be rectified as a more permanent program is evolved. In a district of the southern Great Plains severely affected by drought, the appointment of a coordinator of all Federal agencies dealing with agriculture is a step in the direction of a more integrated attack.

An effort is being made to render the farm program more flexible and adaptable to local conditions by giving farmers a greater part in its formulation. It seems to the writer that the program should be along the line of general principles with the farmer free to work them out on his own farm and permitting alterations from year to year to meet changing conditions. It should be recognized that there is no panacea for the problems of the area and that the judgment of the farm operator should be developed rather than restricted.

Farmers who practiced summer fallowing or kept part of their land in native grass had a smaller proportion of their land in wheat during the base years, 1930-32, and this resulted in their receiving relatively smaller benefit payments than if they had planted all their land to wheat. Some farmers contend that payments should be computed in such a way that farmers who have been using soil-conservation practices all along are not at a disadvantage.

Taxation and Local Government

Methods of taxation and the forms of local government were not greatly different in 1930 from those of 1887 when the county was first organized. But the years since 1930 have brought changes, and the discussion of further changes in this respect. The State has assumed responsibility for the upkeep of highways, but practically none of the burden for relief. Without a detailed account, it may be pointed out

that a heavy burden of taxation has fallen upon owners of land and other real estate. Furthermore, in the assessment of taxes an unduly large proportion has been assessed against such improvements as the farmers possessed. According to statements of local residents, the construction of only a poor set of buildings trebles the taxes on a quarter section of land. Tenants frequently live in very meager dwellings. One of the chief arguments advanced by the landlord for not improving them is the certainty of increased taxes. An exemption on improvements up to $4,000, for example, would encourage the construction of better dwellings by both landlords and resident owners. The assumption by the State of a greater share of responsibility for education and relief would be in line with the trend in other States.

Although there has been some discussion in Kansas, as well as elsewhere, of consolidating the county units, no action has yet been taken. The difficulty of moving the county seat from Santa Fe to Sublette between 1912 and 1920 121/ suggests that there would be considerable opposition to transferring all functions of county government to larger units. But it seems probable that drastic changes in local government will occur during the next generation. There is no longer a necessity for having such a small unit for purposes of taxation, policing, or highway maintenance. It seems to the writer that while larger units will take over certain of these functions, the county can well take on new ones. In fact, the last few years have brought a series of changes in this direction. The county has become a unit for the administration of the Agricultural Adjustment Administration, the Works Progress Administration, the agricultural extension service, and other programs. As local units are given more latitude in the Agricultural Conservation program, they will take on added significance. The local committee of this program has acted to control soil-blowing and in numerous other instances to aid farmers in the county. By a law passed at the 1937 session of the Kansas Legislature the local board of county commissioners could hire fields listed to stop soil-blowing, when the owner refused, and charge the cost to his taxes.

Land-use planning to promote the conservation of moisture and soil fertility or to control blowing is another function that the local unit may assume in the future. A State law enacted in 1937 empowered farm operators and land owners of any county to establish a soil-conservation district that would include the whole county if 75 percent voted in favor of it. If adopted, the district would be mandatory for 5 years 122/

121/ See pp. 75-76.

122/ In November 1937 this plan failed by a vote of 151-70, but a new vote can be taken after 6 months. Sublette Monitor, November 4, 1937.

Greeley, Stanton, Morton, Finney, Grant, and Kearney Counties in western Kansas also voted the proposal down. Farmers are evidently more willing to adjust their activities to yearly programs than to a 5-year mandatory plan. Sublette Monitor, Nov. 11, 1937.

This function, whether on a voluntary or compulsory basis, is likely to receive increasing attention.

Community Organization

Five years of depression and drought have not impaired the functioning of community organization in Haskell County. The set-back during the early part of the drought has been more than overcome since 1933. The suggestions for improvement, therefore, will involve the continuation of tendencies already under way.

To the writer it appears that one of the greatest needs in community organization involves increasing the effectiveness of agricultural training. Although the county is entirely dependent upon agriculture, neither high school offers vocational work in that subject. Good work is being done by the 4-H clubs, but they hardly take the place of the intensive training possible in the schools. At least one of the high schools should offer such a course, or one person might conduct classes in both schools, spending half of the day in each.

Because of the small number of pupils in some of the districts, impetus has recently been given to combining some of the rural schools. This should be encouraged. The consolidation of schools might well be combined with the operation of school buses for the children that live at a distance.

Apparently there is a need for an effective farm organization for group discussion of common problems and for social contacts. The Grange in one neighborhood, and "community meetings" of the Farm Bureau in another, act in this way. Both organizations were started after 1930 and should be carried to other communities. The organization of the men's and women's units of the Farm Bureau has marked an important forward step.

Table 22.- Types of claims on public land, by year of entry, selected area of Haskell County, Kansas, 1885-1909

Year of entry	Total entries	Homestead				Timber culture			Preemption	Declaratory statement
		Number filed	Final certificate	Canceled	Commuted to cash	Number filed	Perfected	Canceled	Number of purchases 1/	Number filed
Total	263	135	35	54	46	57	13	44	42	29
1885	44	10	5	2	3	33	7	26	-	1
1886	94	57	12	25	20	7	2	5	19	11
1887	36	8	1	3	4	8	3	5	20	-
1888	14	5	3	1	1	6	1	5	2	1
1889	4	-	-	-	-	1	-	1	1	2
1890	2	-	-	-	-	2	-	2	-	-
1891	-	-	-	-	-	-	-	-	-	-
1892	1	1	-	1	-	-	-	-	-	-
1893	3	3	-	3	-	-	-	-	-	-
1894	-	-	-	-	-	-	-	-	-	-
1895	-	-	-	-	-	-	-	-	-	-
1896	-	-	-	-	-	-	-	-	-	-
1897	-	-	-	-	-	-	-	-	-	-
1898	-	-	-	-	-	-	-	-	-	-
1899	-	-	-	-	-	-	-	-	-	-
1900	-	-	-	-	-	-	-	-	-	-
1901	-	-	-	-	-	-	-	-	-	-
1902	1	-	-	-	-	-	-	-	-	1
1903	4	4	2	2	-	-	-	-	-	-
1904	3	3	-	3	-	-	-	-	-	-
1905	29	16	4	8	4	-	-	-	-	13
1906	18	18	6	5	7	-	-	-	-	-
1907	7	7	2	1	4	-	-	-	-	-
1908	1	1	-	-	1	-	-	-	-	-
1909	2	2	-	-	2	-	-	-	-	-

&&

1/ In preemption cases only the date of sale is recorded.

Appendix

PUBLIC LAND LAWS

Nearly the entire area of Haskell County, at the time of settlement, was public land and could be secured by filing (1) a preemption, (2) a homestead, or (3) a timber-culture claim.

Under the Preemption Act of 1841, title to 160 acres of land could be obtained by submitting proof of having actually resided on the land for 6 months, constructed a dwelling house, and made certain improvements, and by paying for the land at the full legal price of $1.25 per acre.123/ This act was repealed in 1891. 124/

By the Homestead Act of 1862, any citizen, or applicant for citizenship, who was the head of a family or 21 years of age could acquire a title to 160 acres of land by living upon it and cultivating it for 5 years.125/ This land was free of all charges except a minor fee to be paid when filing the claim. The settler could not be absent from his homestead for more than 6 months without subjecting his claim to a contest on a charge of abandonment. If the settler did not wish to remain for 5 years on his land, he could, after 6 months of continuous residence, commute his entry to cash by paying for the land at the rate of $1.25 per acre. This provision practically changed a homestead into a preemption. The length of residence required for commutation was extended to 14 months in 1891, but as 6 months were allowed to elapse before term of residence was actually begun, only 8 months had to be spent on the land.126/ After 1911, 14 months of actual residence were required for commutation.127/ An Amendment to the Homestead Act in 1912 reduced the length of residence on homesteads from 5 to 3 years,128/ but as all the land in the county had been filed on, this ruling affected only the few homestead claims on which final proof had not been made.

The Timber Culture Act, as amended in 1878, enabled settlers to get 160 acres of land by planting 10 acres in timber and keeping it in good condition for 8 years,129/ but only one quarter in any section could be obtained in this way. When this act was repealed in 1891, provisions were made for persons with pending entries to secure their titles if they had complied with the law for 5 years. However, residents of the State in which land had thus been obtained could, after complying with the law

---

123/ Act of September 4, 1841, 5 U. S. Stat. 452.
124/ Act of March 3, 1891, 26 U. S. Stat. 1095.
125/ Act of May 20, 1862, 12 U. S. Stat. 392.
126/ Sec. 6, Act of March 3, 1891, 26 U. S. Stat. 1098
127/ Department Decision, Aug. 4, 1911. 40 L. D. 228. Decisions of Department of Interior relating to public lands
128/ Act of June 6, 1912, 37 U. S. Stat. 123.
129/ Act of June 14, 1878, 20 U. S. Stat. 113

for only 4 years, secure title to their claims by paying $1.25 per acre. 130/

After both the Preemption and Timber Culture Acts had been repealed in 1891, a person could secure public land only under the Homestead Act. Further modifications have been made to this act but as all the public land in Haskell County had been disposed of before their enactment, they were not operative there.

Table 22 (p. 106) shows that 81 homestead entries were perfected in the selected area of Haskell County, 46 by commutation to cash, and 35 by fulfilling the requirements of residence. In addition, 42 preemptions and 13 timber-culture claims were completed.

130/ Act of March 3, 1891, 26 U. S. Stat. 1095.

METHODOLOGY

The method used in making this study may be designated as "socio-historical." It involves an analysis of pertinent data relating to social development in the selected county. 131/ This represents a departure from most previously published community studies in the emphasis placed upon historical data and in the sources drawn upon. As this community has been subject to recurrent droughts, the data are related to the hypothesis that droughts follow a definite sequence pattern. It is evident that the existence of such a pattern would be of major significance to administrators and farmers who must plan for the future. Data regarding changes in population, type of farming, standard of living, community organization, and attitudes and opinions of the residents are analyzed with reference to the "drought cycle." Droughts have not previously been studied from this point of view; hence, the greater necessity of stating somewhat in detail the methods employed and of critically appraising the reliability of the data on which the analysis is based.

One of the most fruitful sources of historical data regarding the social development of Kansas is the decennial State Census of Agriculture and Population, which was taken in that State up to and including 1925. The writer's methods of utilizing this material were essentially similar to those of Professor James C. Malin, Department of History, University of Kansas, who, in a study previously quoted, 132/ used data from the chedules of this State Census. The schedules, which apparently are a reasonably complete enumeration of families living in the county, contain information regarding size of family, name and age of each member, State of birth, "From where to Kansas," and facts regarding farming operations.

State and Federal Census schedules, 1895-1935, were examined to determine: (1) the persistence of farm operators or their male descendants as farm operators in the county, (2) the persistence of farm operators classified as "newcomers" during each intercensal period and during succeeding periods as compared with "old resident" farm operators (those who had been in the county at least since the preceding census), and (3) the percentage of the total number of farm operators who were reported for the first time at each census.

In addition to the decennial census, a less complete census of agriculture and population is taken each year, between March and June, by the assessor. Because the data pertain to the current year, the acreages planted for such crops as sorghums are incomplete, and the harvests are estimated only. For good years the estimates of wheat harvested are usually too low, and for poor years they are too high. For example, during the drought of 1932-36 estimates reported in the Biennial Reports of the Kansas State Board of Agriculture were consistently

131/ The method of selection is described on page 2.
132/ Malin, James C., op cit.

higher than actual yields of wheat. 133/ Of this census, only the 1920 schedules and those taken since 1927 were available for Haskell County.

The data of the United States Census of Agriculture are considerably more complete than those secured annually by the local assessors. A special tabulation of data from this source was made for 1925, 1930, and 1935 with the permission of the Bureau of the Census. The acreages of non-resident owners who farm both in Haskell County and elsewhere are reported for the respective counties in which they live. Similarly, Haskell County operators are given credit for land that they farm in districts farther west or east.

The effect of this system of reporting for counties in the Great Plains can be illustrated by the figures for Haskell County. A Land Use Survey of the Resettlement Administration, Region 12, Amarillo, Texas, taken in 1936 found 360,302 acres in farms, or about 98 percent of the total land area of the county. The United States Census of Agriculture for 1935 reported 296,937 acres in farms. Nevertheless, the United States Census of Agriculture is the most complete report of agriculture in the counties and is especially valuable in a study of this kind.

The residential and ownership history of a part of the county was obtained from the General Land Office, the local register of deeds, other available records, and the reports of present farm operators and old residents. For the sake of economy, an area 6 miles square (instead of the whole county) was selected for this intensive study (Fig. 2, p. 4). Located in the northwest part of Haskell County, it was entirely in the open country. It included a small settlement of Mennonites, and, in the opinion of local residents, was representative of the various types of situations found in the county, including problems arising from non-resident operation and ownership of land.

A complete record of the ownership history of a tract of land is comparatively easy to obtain. The homestead and preemption claims are recorded in the General Land Office, United States Department of the Interior, and the changes in ownership that took place after the land was patented are filed with the local Register of Deeds. The addresses of present owners also indicate whether they live inside the county or State. The record of mortgages (except those later foreclosed) was not transcribed but this is evidently a significant factor.

The occupancy history of farms, on the other hand, is more difficult to obtain with the same degree of accuracy as it is not a matter of official record. The method used by the writer was to obtain from each of the present farm operators an account of the operators who had been on his own and neighboring farms as far back as he could remember.

133/ Data given on these schedules were not so complete as for the decennial State censuses. The enumeration seemed to include most of the operators except in one township (Lockport) where it was supplemented by local tax records.

This information was placed on maps of the area by 5-year intervals, 1895-1935. Then with further information received on subsequent visits to old settlers, a number of whom were among the first settlers, the gaps in this information were filled in and any apparent inconsistencies were checked. In presenting the data, only years showing significant changes in the pattern of ownership history were included.

A complete file of the local newspaper, Sublette Monitor (formerly Santa Fe Monitor), available in the library of the Kansas State Historical Society at Topeka, proved to be a valuable source of material. This newspaper has played an important part in the development of the county. It has been more than a mere record of events. It has attempted during hard times to encourage the settlers; it reveals the social development of the area, and furnishes almost the only record of the social psychology of the inhabitants during various periods in the development of the county.

The importance of studying attitudes and opinions of the residents of the community has been increasingly apparent as the study proceeded. Somewhat less attention was given to this phase of the report as compared to sections in which it was easier to obtain definite facts - a circumstance which partly explains the inadequacy of the data. While the difficulty of making such a study without frequent contacts in the community over a period of years is not denied, it is felt that without considering the social psychology of the people, such a study would be incomplete.

To supplement the admittedly inadequate statistical data, the writer spent 3 months in Kansas to observe actual conditions and obtain first-hand information. Interviews were held with State and local officials, experts of the agricultural experiment station, farmers, old residents, and others who are familiar with the development and present condition of the area.

BIBLIOGRAPHY

ASCH, BERTA and MANGUS, A. R.
Farmers on Relief and Rehabilitation
Research Monograph VIII
Division of Social Research, Works Progress Administration, 1937

BALL, CARLETON R.
The Grain Sorghums: Immigrant Crops that Have Made Good
Yearbook of the U. S. Dept. of Agriculture, 1913, pp. 221-238

BENTLEY, A. F.
The Condition of the Western Farmer
Johns Hopkins University Studies, Series XI, Nos. 7-8, 1893, pp. 1-91

BLANCHARD, LEOLA H.
Conquest of Southwest Kansas
Wichita Eagle Press, 1931

BOWMAN, ISAIAH
The Pioneer Fringe
The American Geographical Society, New York, 1931

BROWN, EARLE G., GOTTLIEB, SELMA, and LAYBOURN, ROSS L.
Dust Storms and Their Possible Effect on Health
Kansas State Board of Health, Public Health Reports
Vol. 50, No. 40, 1935

CARLSON, AVIS D.
Dust Blowing
Harper's, Vol. 171, July 1935, pp. 149-158

CARR, LOWELL J.
Sequence Pattern of Disaster
American Journal of Sociology, Vol. 38, 1932, pp. 207-218

CHILCOTT, E. C.
The Great Plains Agricultural Development
Yearbook of the U. S. Dept. of Agriculture, 1926, pp. 406-410

CHILCOTT, E. C.
Some Misconceptions Concerning Dry-Farming
Yearbook of the U. S. Dept. of Agriculture, 1911, pp. 247-256

CHILCOTT, E. C.
Dry-Land Farming in the Great Plains Area
Yearbook of the U. S. Dept. of Agriculture, 1907, pp. 451-468

BIBLIOGRAPHY (Cont'd)

CHILCOTT, E. C.
The Relations Between Crop Yields and Precipitation in the Great Plains Area
U. S. Dept. of Agriculture Miscellaneous Circular No. 81, 1927

CLARK, CARROLL D. and ROBERTS, ROY L.
People of Kansas
Kansas State Planning Board
Topeka, 1936

CLEMENTS, FREDERICK E. and CHANEY, RALPH W., DRS.
Environment and Life in the Great Plains
Carnegie Institution of Washington, 1936

COOK, MORRIS L. and others
The Future of the Great Plains
Report of the Great Plains Committee, Washington, D. C., 1936

CRONIN, F. D. and BEERS, H. W.
Areas of Intense Drought Distress, 1930-1936
Research Bulletin No. 1, Series V
Works Progress Administration, 1937

GOODRICH, CARTER and others
Migration and Economic Opportunity; the Report of the Study of Population Redistribution
University of Pennsylvania Press, 1936
(Chapter V, pp. 202-250, prepared by C. Warren Thornthwaite)

GRIMES, W. E.
The Effect of Improved Machinery and Production Methods on the Organization of Farms in the Hard Winter Wheat Belt
Journal of Farm Economics, Vol. 10, 1928, pp. 225-231

HALLSTED, A. L. and MATHEWS, O. R.
Soil Moisture and Winter Wheat with Suggestions on Abandonment
Bulletin No. 273, Kansas Agricultural Experiment Station, 1936

HIBBARD, B. H.
A History of the Public Land Policies
MacMillan Company, New York, 1924

JOEL, ARTHUR H.
Soil Conservation Reconnaissance Survey of the Southern Great Plains Wind Erosion Area
Technical Bulletin No. 556
U. S. Dept. of Agriculture, 1937

BIBLIOGRAPHY (Cont'd)

JOHNSON, WILLARD D.
The High Plains and Their Utilization
U. S. Geological Survey, 21st Annual Report, 1899-1900, Part IV, pp. 609-741; 22nd Annual Report 1900-1901, Part IV, pp. 631-669.

KELLOGG, CHARLES E.
Soil Blowing and Dust Storms
U. S. Dept. of Agriculture Miscellaneous Bulletin No. 221, 1935

KINCER, JOSEPH B.
The Climate of the Great Plains as a Factor in Their Utilization
Annals of the Association of American Geographers, Vol. XIII, No. 2, 1923, pp. 67-80

LINK, IRENE
Relief and Rehabilitation in the Drought Area, Series V, No. 3
Division of Social Research, Works Progress Administration, 1937

LORD, RUSSELL
Men of Earth
Longmans, Green and Co., London-New York-Toronto, 1931

MACDONALD, WM.
Dry Farming - The Principles and Practice
The Century Co., New York, 1909

MALIN, JAMES C.
The Turnover of Farm Population in Kansas
Kansas State Historical Quarterly, Vol. IV, No. 4
Topeka, 1935, pp. 339-372

MARBUT, C. F.
Soil of the Great Plains
Annals of the Association of American Geographers, Vol. XIII, No. 2, 1923, pp. 41-66

MILLER, WALLACE ELDEN
The Peopling of Kansas
Ph.D. Thesis, Columbia University, Press of F. J. Heer, Columbus, Ohio, 1906

NEWELL, FREDERICK H.
Irrigation on the Great Plains
Yearbook of the U. S. Dept. of Agriculture, 1896, pp. 167-196

BIBLIOGRAPHY (Cont'd)

POWELL, J. W.
U. S. Geographical and Geological Survey of the Rocky Mountain Region, Report of the Lands of the Arid Region of the United States, with a more detailed account of the lands of Utah, with maps.
Government Printing Office, 1878

SAVAGE, D. A. and JACOBSON, L. A.
The Killing Effect of Heat and Drought on Buffalo Grass and Blue Grama Grass at Hays, Kansas
Journal of American Society of Agronomy, Vol. 27, No. 7, July 1935, pp. 566-582

SEARS, PAUL B.
Deserts on the March
University of Oklahoma Press, Norman, 1935

SHANTZ, H. L.
The Natural Vegetation of the Great Plains Region
Annals of the Association of American Geographers, Vol. XIII, No. 2, 1923, pp. 80-94

TAEUBER, CONRAD and TAYLOR, CARL C.
The People of the Drought States
Research Bulletin No. 2, Series V
Works Progress Administration, 1937

WEAVER, J. E. and ALBERTSON, F. W.
Effects of the Great Drought on the Prairies of Iowa, Nebraska, and Kansas
Ecology, Vol. 17, No. 4, 1936, pp. 567-639

WEBB, WALTER P.
The Great Plains
Houghton-Mifflin Co., New York, 1936

YOUNGBLOOD, B., and COX, A. B.
An Economic Study of a Typical Ranching Area on the Edwards Plateau of Texas
Texas Agricultural Experiment Station, Bulletin No. 297, 1922

ACKNOWLEDGMENT

The writer has incurred many obligations while making this study. First of all, the genuine cooperation of residents of Haskell County, Kansas, including county officials, old residents, farmers, and others were essential to the study. Special tabulations of basic data were made possible through the cooperation of the Kansas State Historical Society; the Land Use Planning Division of Region 12 and the Kansas State Office of the Resettlement Administration; the Kansas State Board of Agriculture; the General Land Office, Department of the Interior; the Bureau of the Census; and the Bureau of Agricultural Economics. Numerous individuals connected with Kansas State University, Kansas State College, and Hays College and Experiment Station have assisted.

The report was prepared under the general direction of Dr. Carl C. Taylor. Miss Renee Fantin collected various statistical data, including the Homestead Records, supervised part of the tabulation, has critically read the manuscript, and made suggestions regarding each part.